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ABSTRACT

To identify the performance-based professional education needs of secondary level occupational teachers in New York State, an instrument composed of 365 performance behaviors organized into 57 clusters was mailed to 677 teachers representing six vocational education service areas and to 70 occupational supervisors. Usable returns from 515 teachers and 64 supervisors revealed that: (1) The teachers perceive some professional competencies (performance elements) as being very important in fulfilling their professional role while other professional competencies are perceived as unimportant, (2) There is a substantial overlap in the importance attached to professional competencies by the teachers, (3) The teachers in the six service areas perceive their performance at similar levels, (4) The level of teacher-supervisor agreement fluctuates widely between clusters, (5) There is little difference in the perceived inservice needs of occupational teachers in New York State, and (6) Professional education inservice programs are urgently needed. A sample survey instrument is appended. (SB)

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PERFORMANCE-BASED PROFESSIONAL EDUCATION INSERVICE NEEDS OF SECONDARY LEVEL OCCUPATIONAL TEACHERS IN NEW YORK STATE

by

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Researchers undertaking similar research efforts and/or application of the findings reported herein are encouraged to share their findings and recommendations with the Institute in the interests of furthering professional development of inservice programs for occupational educators.

VITA

The author was born in Dryden, Virginia on September 21, 1940. He graduated from Dryden High School, Dryden, Virginia in 1959 and entered Virginia Polytechnic Institute, Blacksburg, Virginia in September of that year.

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CHAPTER I

DEFINITION OF THE PROBLEM

Introduction

Inservice education includes all those activities that are designed to contribute to the improvement and effectiveness of teachers in the practice of their profession. Terms such as staff development, inservice training, and professional growth are used interchangeably in referring to these continuing educational activities of professional school personnel.[1] These activities are generally classified as either technical or professional; technical dealing with advancements in technical knowledge and professional dealing with the process of teaching.

In the professional domain, there has been a rapidly accelerating acceptance of performance-based teacher education by occupational educators. The movement emphasizes specified performance goals requiring demonstrated ability as contrasted to traditional experience-based teacher education programs. This project utilized performance statements or elements as the vehicle for securing occupational educators perception of their inservice professional education need.

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[1] Arnold Finch, Growth In-Service Education Programs That Work, Successful School Administration Series, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1969, p. 1.

Federal and state education agencies have long recognized the importance of inservice education for occupational educators. The Division of Comprehensive and Vocational Education Research in the U.S. Office of Education stated:

> Providing inservice education for vocational educators is one of the formidable tasks facing the field of vocational education. Skyrocketing student enrollments, expansion in the number of full and part-time vocational educators, . . . and new innovations in educational techniques emphasize the demand for more and better inservice training . . .[2]

The state of New York articulates the same awareness in its State Plan for Occupational Education. One of the long-range and continuing objectives is as follows:

> To strengthen the preparation of occupational education teachers at all instructional levels through improved pre-service teacher education programs and increased participation of occupational education teachers in inservice programs.[3]

The recently completed report of the New York State Commission on the Quality, Cost, and Financing of Elementary and Secondary Education stresses inservice education for teachers and concludes that ". . . the coming decade will require a far greater emphasis on inservice training."[4] The commission expresses a concern that teacher's advanced degrees and certificates provide no assurance a school system will be strengthened in its areas of need. An improved method of identifying inservice requirements is needed.

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[2] U.S. Office of Education, Bureau of Research, Division of Comprehensive and Vocational Education Research, Organization and Administration Studies Branch, Guidelines and Priorities for Short-Term Training Programs for Professional Personnel Development in Vocational and Technical Education (Washington: Department of Health, Education, and Welfare, December 1968), p. 1.

[3] Regents of the University of the State of New York, Occupational Education, The State Education Department, Albany, New York, May 1971.

The emphasis attached to inservice education by the New York State Education Department's Office of Occupational Education seems to be well founded. An individual can be certified to teach an occupational course by any one of three different routes. Effective in October 1971 and mandatory as of September 1, 1974, the following certification channels are available:[5] (1) A four-year baccalaureate program, including 36 semester hours of work in the occupational teaching area for which certification is sought, 12 semester hours of teacher training courses, a college supervised student teaching experience, plus a minimum of one calendar year of appropriate experience in the occupation for which the certificate is to be issued; (2) A two-year college degree in an occupational area, 18 semester hours of professional education course work, a college supervised student

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4. New York State Commission on the Quality, Cost, and Financing of Elementary and Secondary Education, Summary of Volumes II & III, The University of the State of New York, The State Education Department, Albany, New York, October 1972, p. 55.

5. Vincent C. Gazzetta and Alvin P. Lierheimer, "Changes in Certification Requirements for Teachers of Occupational Subjects," Paper, October 1971.

teaching experience, and a minimum of two consecutive years of appropriate experience in the occupation for which the certificate is to be issued; or (3) Completion of a program of 30 semester hours of college course work, including 18 semester hours of professional education, a college supervised student teaching experience, and a minimum of four consecutive years of appropriate work experience. In reality, many directors of occupational education hire occupational teachers who have completed none of the certification routes. The following table summarizes the certification status of five hundred and fifteen occupational teacher participants in this study.

TABLE I. NEW YORK STATE TEACHING CERTIFICATION HELD BY OCCUPATIONAL TEACHERS RESPONDING TO THIS "IN-SERVICE NEEDS" RESEARCH PROJECT--1973

		Percent			
Service Area	Number of Respondents	No Answer	Default	Provisional	Permanent
Agriculture	91	05	09	42	44
Business	86	07	24	22	47
Distributive Education	21	00	14	52	33
Health	112	13	11	26	51
Home Economics	43	14	07	30	49
Trade & Industrial	162	06	14	23	57
Total Number of Respondents	515	40	70	148	257
Weighted Percent of Responses		08%	14%	29%	50%

A dearth of certified occupational teachers is the principal reason for hiring occupational teachers with default certification status. This reality adds even more impetus to the State Education Department concern for upgrading the quality of inservice programs and increasing participation in them.

The occupational education programs in New York State have increased rapidly within the last few years. This increase has been significant with the expansion of Boards of Cooperative Educational Services (better known as BOCES) occupational programs. This expansion has been accompanied by a similar increase in both quantity and specialization variability of occupational teachers. The continuing problem of identifying the inservice needs of occupational teachers has been increased in complexity by both the increased number of teachers and the expanded number of specializations taught.

Statement of the Problem

Occupational teachers are entering the profession with an increasingly varied background of professional and occupational experiences. The move toward expanded opportunities for certification has produced an increasing number of occupational teachers whose professional competencies are relatively unknown to the teacher educators, supervisors, and administrators who must assume responsibility for developing inservice programs that upgrade the teacher's skills. In line with this lack of planning information, the major purpose of this study was the identification of the professional education inservice needs of secondary level occupational teachers in New York State.

Objectives of the Study

The major purpose of the study was the identification of the performance-based professional education needs of secondary level occupational teachers in New York State. To accomplish this purpose, the following objectives have been established:

1. To identify performance elements that are perceived as important from the viewpoint of secondary level:
   (a) agriculture teachers.
   (b) business teachers.
   (c) distributive education teachers.
   (d) health teachers.
   (e) home economics teachers.
   (f) trade and industrial teachers.
2. To ascertain the perceived performance level of:
   (a) agriculture teachers.
   (b) business teachers.
   (c) distributive education teachers.
   (d) health teachers.
   (e) home economics teachers.
   (f) trade and industrial teachers.
3. To determine if significant differences exist between agriculture, business, distributive education, health, home economics, and trade and industrial teachers regarding their perception of inservice need.

4. To correlate the occupational teacher's perception of inservice need on identified performance clusters with the perception of his/her immediate supervisor.
5. To identify the performance-based professional education inservice program(s) needed by secondary level occupational teachers in New York State.

Research Hypotheses

To accomplish the objectives of the study, the following hypotheses were established:

1. There are no significant differences between New York State secondary level teachers of agriculture, business, distributive education, health, home economics, and trade and industry regarding their need for inservice education.
2. There are no significant differences between New York State secondary level occupational teacher's perception of training need inservice and the perception of the occupational teacher's immediate supervisor.

Significance of the Study

Secondary level occupational education has grown rapidly as an element in the total educational system of New York State, enrollments increasing from approximately 290,000 in fiscal year 1971 to 349,982 in fiscal year 1972. During this fiscal year, 234 new secondary level occupational programs were added and 110 expanded. Most of this addition (82%) and expansion (67%) occurred in BOCES and major city vocational centers.[6]

Expansion in enrollment created a need for new as well as replacement instructors. All indications are that most of these instructors are less than permanently certified. Projections for the future indicate continued expansion of pupil enrollments and course offerings creating an increase in the demand for certified occupational teachers. Since many of the presently employed teachers and most of the new teachers have a certification as well as professional need for inservice education, it is imperative that efforts be directed toward identifying then providing programs that satisfy their need.

This study was designed to identify professional education inservice need as perceived by secondary level occupational teachers in New York State. The study will provide data from which guidelines will be prepared indicating commonality of inservice need via service areas as well as inservice need unique to one or more service area.

Any agency or individual responsible for identifying, planning, organizing, and/or implementing professional education inservice programs in New York, and possibly other states, will be greatly assisted by knowing the importance and performance levels occupational teachers attach to identified professional education competencies.

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[6] New York State Annual Report for Occupational Education - Fiscal Year 1972, The State Education Department, Office of Occupational Education, Albany, New York, pp. 9-13.

A secondary, but very useful, output of the project will be data that facilitate the development of preservice professional education curricula for occupational educators.

Basic Assumptions

The following basic assumptions were made:

1. The Directory of New York State Occupational Education Personnel (1972-73) accurately reflected the total employment of occupational teachers in New York State BOCES and vocational high schools.
2. The sample group accurately reflected the population of occupational teachers employed in BOCES and vocational high schools in New York State (exclusive of New York City).
3. The identified performance elements, clusters, and categories represented a reasonably inclusive list of the pedagogical functions of an occupational teacher.
4. The sample of occupational teachers correctly understood the meaning of individual performance elements and clusters (or indicated such lack of

understanding in their response).

5. A self-administered instrument provided reliable and valid data from the sample groups.
6. Responses from the 515 responding occupational teachers who provided useable data accurately represented the perceptions of the 677 occupational teachers selected in the sample.
7. The immediate supervisor of the occupational teacher is best qualified to indicate the professional performance level of selected occupational teachers.
8. There is no difference in quality of response of teachers receiving one-half of the total instrument and teachers receiving one-third of the total instrument.

Limitations

Limitations of the study were:

1. The specific findings are limited to occupational teachers employed in BOCES and vocational high schools in New York State, exclusive of New York City.
2. The findings represent the perceptions of the sample group at only one time during the school year (February-March).
3. The importance and performance level expressed by one occupational teacher may not be identical to

those of a second occupational teacher who indicated the same importance and performance level due to different interpretations of the meaning of response levels.

4. Data were limited to completeness of response received via mail.

Definition of Terms

The terms used in the context of this study are defined as follows:

Boards of Cooperative Educational Services (BOCES)--a policymaking board of citizens with a district superintendent of schools as executive officer. This board provides educational services on a shared basis to component school districts. In this project, BOCES references are limited to the occupational education phase of the BOCES program.

Category--an easily recognized major function or duty of educational personnel under which related performance elements may be identified and classified.[7]

Cluster of Elements (Cluster)--a compatible grouping of related performance elements brought together for greater meaning and understanding.[8]

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7. Calvin J. Cotrell, et. al., Model Curricula for Vocational and Technical Teacher Education: Report Number III, The Center for Vocational and Technical Education, Columbus, Ohio, March 1972, p. 27.

8. *Ibid.*, p. 27.

Cooperative Education (Coordination)--a program of occupational education for persons who, through a cooperative arrangement between the school and employers, receive instruction, including required academic courses and related occupational instruction by alternation of study at school with a job in any occupational field, but these two experiences must be planned and supervised by the school and employers so that each contributes to the student's education and to his employability."[9]

Occupational Education--the preparation or retraining for employment in any occupational field requiring less than a baccalaureate degree.

Performance Element (skill, task, competency)[10]--a statement of an observable behavior which describes what a teacher will be doing as he/she functions in his/her professional role.

Service Area--refers to one of the mutually exclusive teaching areas of agriculture, business, distributive education, health, home economics, or trade and industry.

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[9] A Guide for Cooperative Vocational Education, University of Minnesota, St. Paul, Minnesota, September 1969, p. 13.

[10] Cotrell, et. al., op. cit., p. 28.

CHAPTER II

REVIEW OF RELATED LITERATURE AND CURRENT PRACTICES

The review of literature was conducted with three principal objectives. The first was to analyze prevailing thought regarding the value of and need for inservice education, the second was to determine current practices regarding identification and delivery of inservice education, and the third was to assemble the ideas of leading occupational educators regarding performance-based occupational teacher education.

Inservice Education

The Vocational Education Act of 1963 and the Vocational Education Amendments of 1968 departed from the categorical monetary grants of previous years and gave impetus to the movement toward a more similar pre- and inservice education program for occupational teachers in the varying service areas. The stated purpose was the ". . . maintenance, extension, and improvement of vocational education . . . (as well as) . . . development of new programs of vocational education."[11] The allocation of monies without specific designations provided administrators increased flexibility in designing curricula. The resultant rush toward expansion of offerings created an increased awareness of the role inservice education could play in upgrading the quality of occupational programs. Love and Stevens summarized this awareness by indicating ". . . inservice teacher education classes offer the best available approach to the promotion of new or improved programs in vocational education."[12]

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[11] Vocational Education Act of 1963, Public Law 88-210, December 18, 1963 and Amendments to the Vocational Education Act of 1963, Public Law 90-576, October 16, 1968, p. 1.

Dr. Melvin Barlow,[13] the American Vocational Journal's editor for technical education and director of the Division of Vocational Education at UCLA, indicates emphasis on inservice teacher education has been on the upswing for the last decade. He believes that a main objective of current inservice programs should be continuous provision of information that will keep the occupational teacher abreast of new developments in teaching and learning. His thoughts relative to inservice education are summarized as follows: "Inservice teacher education looms as the dominant imperative related to teacher qualifications."[14]

Inservice teacher education programs exist in practically every college and university in the country. Many local school districts develop or contract for inservice programs. Long standing existence of these programs is evidence that they apparently make some contribution to teacher competence. While there is a dearth of studies supporting the above conclusion, Finch[15] found it to be true. He conducted a comprehensive study in a Los Angeles School District to ascertain the relationship between teacher participation in inservice programs and the teacher's professional competence. His study involved 270 nearly homogeneous pairs of teachers rated on a forced choice evaluation instrument consisting of 40 items. The study concluded that there is a significant difference in teacher effectiveness between homogeneous pairs of teachers with differing amounts of inservice education. In occupational education, Klabenes[16] measured the effect of inservice education on post-secondary vocational-technical instructor's classroom teaching behavior by video-taping three sessions each of pre- and post-inservice teaching. He concluded there was a significant change in the instructors classroom teaching behavior pre- and post-test. Henry[17] determined the effect of inservice education in verbal interaction analysis on the performance of occupational student teachers. Audio tapes were used to measure pre- and post-inservice teaching style. The inservice treatment consisted of a one-day program designed to cause the student teacher to use a more indirect style of teaching with the amount of indirectness measured by the Flanders' system of verbal interaction analysis. His findings indicate increased use of indirectness by student teachers completing the inservice program.

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[12] Gene M. Love and Glenn Z. Stevens, "Improving In-Service Classes for Teachers," The Agricultural Education Magazine, Vol. 37, No. 8, March 1965, p. 220.

[13] Melvin Barlow, "Professional Development in Vocational Teacher Education," American Vocational Journal, Vol. 46, No. 8, November 1971, pp. 28-30.

[14] Ibid., p. 29.

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[15] Finch, op. cit., p. 57.

[16] Robert F. Klabenes, Assessment of the Results of an Inservice Education Program for Post-Secondary Vocational-Technical Education Instructors, Ed.D. Dissertation, Lincoln, Nebraska: U. of Nebraska, 1971.

[17] Reginald D. Henry, Effects of Inservice Education in Verbal Interaction Analysis on the Performance of Student

An occupational educator's need for inservice education, while seldom empirically documented, is an accepted fact in the professional community. Most authors on the subject argue that it is an impossibility for a pre-service program to adequately prepare an occupational teacher for his/her entire professional career. Lierheimer,[18] referring to program development for inservice teacher education in New York State, sees even the teacher who is well trained at the beginning of his career rapidly falling behind as a result of explosive developments in substance and technology unless that teacher continues to receive additional training. He

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Teachers Before and After Entering the Teaching Profession, Ph.D. Thesis, Columbia, Missouri: U. of Missouri, 1971.

[18] Alvin P. Lierheimer, Program Development for Inservice Teacher Education in the New York State Education Department, Abstract of a Report Prepared by Basic Systems, Inc. for the Division of Teacher Education and Certification, August 17, 1966, pp. 1-9.

indicates that inservice training of high quality for the great majority of teachers in the state is indispensible; improvement in preservice education, although highly desirable, is only a partial solution to improving the quality of education. It is Lierheimer's feeling that the "need for inservice training derives from a variety of conditions and concerns; teacher shortages, curriculum changes, advances in substantive knowledge and in the techniques of teaching, development of new instructional hardware, etc. which combine to produce a complicated, overlapping, and inexhaustible set of training needs."[19] Edmonds et al.[20] writes that the preservice education of teachers represents only a minor fraction of the time a person must spend in learning to become an effective teacher. Preservice education must be followed by inservice education which lasts throughout the professional career of the teacher. Annis[21] indicates the importance of continuing inservice teacher education programs which cannot be overemphasized. He feels that even the best preservice teacher education program cannot adequately prepare its graduates for all the teaching situations they will encounter.

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[19] Ibid., p. 8.

[20] Fred Edmonds, James R. Ogletree, and Pat W. Wear, In-Service Teacher Education: Crucial Process in Educational Change, Bulletin of the Bureau of School Service, U. of Kentucky, Lexington, Vol. XXXIX, No. 1, September 1966, p. 24.

[21] William H. Annis, "Inservice Teacher Education," The Agricultural Education Magazine, May 1971, pp. 264-265.

Bail and Cardozier[22] list three reasons for inservice education: it is impossible to prepare a teacher adequately in the time available for preservice education; teachers require experience before they are fully cognizant of their needs; and the occupational teacher's job is constantly changing, necessitating a periodic update action. Perhaps Harris et al. summarizes thought on the need for inservice education when he lists the following fundamental reasons for its existence: "(1) Preservice preparation of professional staff members is rarely ideal and may be primarily an introduction to professional preparation as such; (2) Social and educational change makes current professional practices obsolete or relatively ineffective in a very short period of time. This applies to methods and techniques, tools and substantive knowledge itself. (3) Coordination and articulation of instructional practices require changes in people. Even when each instructional staff member is functioning at a highly professional level, employing an optimum number of the most effective practices, such an instructional program might still be relatively uncoordinated from subject to subject and poorly articulated from year to year. (4) Other factors argue for inservice education activities of rather diverse kinds. Morale can be stimulated and maintained through inservice education, and is a contribution to instruction in itself, even if instructional improvement of any dynamic kind does not occur."[23]

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[22] Joe P. Bail and V. R. Cardozier, "Inservice Education for Teachers of Agriculture," Teacher Education in Agriculture, V. R. Cardozier, editor, The Interstate: Danville, Illinois, 1967, pp. 253-254.

There seems to be a diversity of thought regarding the individual or agency responsible for inservice education. Some feel it is the teacher's responsibility, some see it as the responsibility of the state education department and teacher education institutions, while most see it as an effort requiring input from all concerned. The spectrum ranges from Edmonds[24] advocating the individual teachers' development of inservice growth activities which include travel, reading, and discussions with other professionals to Scarborough's[25] position that teachers must take increased initiative for their inservice education but should expect help from supervisors and teacher educators to Lierheimer's[26] advocation of increased state responsibility. Lierheimer recognizes teachers are professionals and indicates that professionals are normally responsible for keeping abreast of advances in their field. It is his contention, however, that teachers often have neither the time nor money to enroll in or initiate appropriate training programs. He feels that teachers who are required to provide for their own training will generally be unable to do so and everyone will be penalized as a result. In between the dichotomous view of predominate teacher responsibility and predominate state responsibility lies the majority view of cooperative effort and cooperative responsibility. Stevens[27] indicates that inservice education for occupational teachers has been a joint responsibility of state education departments, the state supervisory staff, local supervisory staff, local supervisors, teacher education departments of various colleges and universities, and teachers. All must play an important role if the teacher's needs are to be properly identified, articulated, and met. If Annis[28] had his way, he would establish a coordinator of professional development in state education departments. This person would have the responsibility of knowing the teachers needs and the competencies of various teacher education programs by utilizing reports from teachers, supervisors, superintendents, and teacher educators. He would have the responsibility of coordinating an overall inservice program that was efficient and effective.

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[23] Ben M. Harris, Wailand Bessent, and Kenneth E. McIntyre, In-Service Education: A Guide to Better Practice, Prentice-Hall, Inc.: Englewood Cliffs, New Jersey, 1969, p. 3.

[24] Edmonds, et. al., op. cit., p. 25.

[25] Cayce Scarborough, "In-Service Education or Self-Education?," The Agricultural Education Magazine, Vol. 38, No. 8, February 1966, p. 171

[26] Lierheimer, op. cit., pp. 2-3.

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27. Glenn Z. Stevens, Agricultural Education, The Center for Applied Research in Education, Inc.: New York, 1967, pp. 94-101.

28. Annis, op. cit., pp. 264-265.

Just as there are many individuals and agencies responsible for inservice education, there is an equal number who should have an input assessing the occupational teacher's inservice needs. Unfortunately, supervisors don't always supervise at the optimum level, communications are sometimes non-existent or become garbled, funds are often inadequate to offer the programs that are needed, etc. In reality, oftimes courses or programs are offered with minimal consideration for the teacher's most pressing need. The American Association of Colleges for Teacher Education critiqued inservice programs as follows: They are often chaotic. Teachers typically take courses to satisfy a university or college requirement for a graduate degree. The course work often does not prepare the teacher to do a better job at the tasks that arise on the job. To correct the situation, more emphasis is needed in developing programs directed to the improvement of the teachers performance.[29]

Occupational educators are increasingly stressing teacher involvement in identifying need for inservice education. It was recognized by the New York State Education Department[30] in 1966 that the degree to which inservice programs answer a need felt by teachers was a principle factor governing teacher participation in inservice courses. The report recognized the degree of teacher control over his own professional growth as an important motivation factor. It recommended that administrators encourage teachers toward self-improvement; one way of accomplishing this objective was allowing teachers to exercise a high degree of control over their own professional growth. The report further recommended that the state education department attempt to determine the kinds of inservice training teachers felt they needed.

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[29] B. Othanel Smith, Saul B. Cohen, and Arthur Pearl (collaborators) teachers for the real world, The American Association of Colleges for Teacher Education, Washington, D.C., 1969, p. 15.

[30] Lierheimer, op. cit., pp. 6-7.

Outside New York State, occupational educators are echoing the same sentiment. Finch[31] indicates that no program planned primarily for teachers will be successful unless in a large measure it is their program. Moffit[32] says that "social scientist have repeatedly asserted that the success of inservice programs largely depends upon the degree to which teachers themselves identify their problems" plus he indicates that "only under circumstances in which teachers find their own problems and want to do something about them can effective inservice education programs exist."

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31. Finch, op. cit., p. 16.

32. John C. Moffitt, In-Service Education for Teachers, The Center for Applied Research in Education, Inc.: Washington, D.C., 1963, p. 57.

Ridley[33] says that the quality of inservice education of teachers depends on the effectiveness with which the participants identify problems that are real and personal. Edmonds et. al.[34] finds that "each teacher is constantly relating himself and his personal competencies to his simultaneous experiences in school improvement endeavors, and out of this relationship he begins to assess his own competencies and to avail himself of opportunities to improve the level of his competencies." Bush[35] believes there is an urgent need in the teaching profession for teachers to have a greater degree of self-determination and self-regulation. Regarding inservice education, he feels a good prescription to rejuvenate programs is one calling for the treatment of teachers as professionally competent persons.

Occupational teachers oftimes have higher expectations of inservice education than the programs deliver. Hughes,[36] in measuring the expressed inservice education needs of 838 home economics teachers, found that while ninety-three percent said they would participate in inservice education programs, the majority felt programs presently offered were not meeting their needs. Crunkilton and Bail[37] found that BOCES occupational teachers indicate a low fulfillment of their inservice education expectations. Perhaps these findings indicate greater occupational teacher participation in inservice programs if the programs serve a felt teacher need.

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[33] Agnes F. Ridley, "Inservice Teacher Education and the Affective Domain," American Vocational Journal, January 1971, p. 47.

[34] Edmonds, et. al., op. cit., p. 30.

[35] Robert N. Bush, "Curriculum-Proof Teachers: Who Does What to Whom," Improving In-Service Education: Proposals and Procedures for Change, Louis J. Rubin, editor, Allyn and Bacon, Inc.: Rockleigh, New Jersey, 1971, pp. 37-39.

[36] Lois Hughes, The Expressed Needs of Missouri Home Economics Teachers in Relation to Inservice Education, Missouri Occupational Research Coordinating Unit: Jefferson City, 1969.

While the method of ascertaining inservice needs used in this project should work for technical as well as professional competencies, the project was limited to the professional domain. Inclusion of all possible technical and professional competencies of an occupational teacher is beyond the scope of the study, and perhaps is too large an undertaking for any one study. Bail and Cardozier[38] lend credibility to the exclusion of technical rather than professional competencies when they indicate that "one might more closely approach adequate mastery of technical material than the professional competencies in a preservice program." This is particularly true in New York State because of the increasing number of occupational teachers with in depth backgrounds in their occupations but little experience or

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37. John R. Crunkilton and Joe P. Bail, Area Occupational Education Programs in a Selected Twelve County Area in New York: Concerns and Expectations, Ph.D. Thesis, Ithaca, New York: Cornell University, 1969, p. 120.

38. Bail and Cardozier, op. cit., p. 254.

training in teaching. Henninger[39] spoke to this situation when he indicated the desired attributes of technical institute faculty are: (1) knowledge of subject matter, and (2) performance of the teaching function. Though both attributes are desired, institutions, if forced to choose, would prefer a teacher with industrial experience hoping to provide the pedagogy on the job. Bouchard,[40] in conducting a study to ascertain the training extension agents need for proficiency in their jobs, discovered that all of his subjects expressed need for more training in program planning and less in technical subject matter. The present situation in New York State appears to be one of occupational teachers having greater need for pedagogical inservice education than technical inservice education.

The literature indicates inservice education programs have value and serve a need that cannot be satisfied in the preservice program. Most occupational educators agree that a cooperative effort by all concerned is needed if optimum results are to be attained. It was generally felt that optimum results can be obtained only if occupational teachers are allowed to make increasingly important inputs into the

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39. G. R. Henninger, The Technical Institutes in America, McGraw-Hill Book Company, Inc.: New York, 1959.

40. Andre J. Bouchard, Training Needs of County Extension Agents in Quebec, Canada, Ph.D. Thesis, Columbus, Ohio: The Ohio State University, 1969.

planning, organization, and delivery of inservice programs. Occupational educators also felt that inservice programs are needed to increase competencies in both pedagogical and technical domains, but, if forced to choose, increasing competencies in the pedagogical domain is perhaps more important for occupational teachers.

Survey of Teacher Education Institutions

During July of 1972, the researcher contacted via questionnaire occupational teacher education institutions throughout the United States to ascertain their methods of identifying inservice need of occupational teachers. Of particular concern was the involvement of individual occupational teachers in the identification of their inservice need. Responses were received from service area departments of institutions identified with agriculture, business, distributive education, home economics, and trade and industrial education (Appendix A). Institutions offering inservice programs in the health service area were not contacted because of the researcher's inability to obtain a list of teacher education institutions offering programs for this emerging field. The American Vocational Association and the Bureau of Adult, Vocational, and Technical Education in the Office of Education (Department of Health, Education, and Welfare) were contacted but could not provide the needed materials.

Of the fifty institutions contacted, thirty-one or sixty-two percent responded. The level of response would probably have been much higher had the researchers been able to contact the institutions during a period other than the middle of the vacation period.

The researchers were very interested in identifying methods occupational teacher education institutions use to ascertain the subject and type of inservice program needed by occupational teachers in their states. The data in Table II summarize the response representatives of occupational teacher education institutions gave via an open-ended questionnaire (Appendix A).

Most of the occupational teacher education institutions have an identified procedure by which they establish the inservice need of occupational teachers in their state. The most favored of the procedures involved a close working relationship with the service area bureaus in the respective state education departments. Approximately 60% indicate they use surveys, most of the examples of surveys received being lists of courses that could be offered. Personal contact between the teacher educator and the occupational teacher was also considered quite important, most of this contact being through the medium of actually observing the teacher or interacting with the teacher at professional conference. The latter has an obvious disadvantage for those teachers who do not attend professional conferences.

The researcher's experience and these data seem to

TABLE II. METHODS USED BY OCCUPATIONAL TEACHER EDUCATION INSTITUTIONS TO IDENTIFY THE INSERVICE NEED OF OCCUPATIONAL TEACHERS

Service Area	Number of Institutions Responding	Joint Staff[a]	Survey	Observation	Personal Conference	Teacher Request	Certification Requirements	New Developments[b]	Advisory Councils
Agriculture	10	8	8	4	5	1	0	2	1
Business	5	1	2	2	0	2	1	0	0
Distributive Education	7	7	4	3	1	2	3	1	0
Home Economics	4	2	1	2	1	1	0	2	1
Trade and Industrial	5	3	3	1	1	0	1	0	1
TOTALS	31	21	18	12	8	6	5	5	3

a. Joint Staff implies representatives from the occupational teacher education institution and representatives from the state education department.

b. New developments is defined as knowledge the occupational teacher educator feels is not commonly possessed by occupational teachers in the service area.

indicate that a teacher who recognizes his own inservice need has ample opportunity to be heard if he is aggressive and persistent in relaying the information to appropriate teacher educators. The teacher who is active in his/her professional organization has an even greater opportunity to communicate his/her need. The less professionally active teacher finds his opportunity when observed by a state education department supervisor, teacher educator, or when surveyed.

Most survey forms the researcher observed list a potpourri of course titles requesting the occupational teacher to indicate his desires in some order of importance. This method creates a communication problem for the occupational teacher: ie. if audio-visual aids is listed as a course title, does this mean he/she needs training in all audio visual subjects or only for the overhead projector?

Data in Table III and IV summarize the extent surveyed occupational teacher educators elicit and or utilize individual teacher input in the identification of occupational teacher's inservice requirements. Approximately 40 percent of the institutions initiated a response from occupational teachers through a survey though an even higher percentage of institutions were depending on occupational teachers to initiate requests for inservice programs. The professional associations of the occupational teachers allocate time on their agendas for occupational teacher educators to discuss inservice needs in about half the cases. Approximately an equal number of occupational teacher professional associations are not involved. These data and the researchers experience seem to indicate that occupational teacher professional associations are not being utilized to their optimum in identifying inservice requirements of occupational teachers.

TABLE III. THE EXTENT INDIVIDUAL OCCUPATIONAL TEACHERS ARE INVOLVED IN IDENTIFYING THEIR INSERVICE NEEDS

Service Area	Number of Respondents	Survey	Teacher Initiated Request	Not Involved or Only Through Professional Assoc.
Agriculture	10	4	2	5
Business	5	1	3	1
Distributive Education	7	3	4	2
Home Economics	4	3	4	0
Trade and Industrial	5	1	2	2
TOTALS	31	12	15	10

Many occupational teacher education institutions indicate they subsidize the inservice education of occupational teachers. The data in Table V indicate this subsidization is relatively equally distributed via service areas. The most popular form of support is a monetary inducement to a select group (ie. first year teachers, teachers of the disadvantaged, etc.). Other forms of support are explicated in Table VI.

Most occupational teacher education institutions expend energy to identify the inservice needs of occupational teachers but the data seem to indicate the search is not very systematic or thorough. Individual occupational teachers and occupational educator professional organizations are involved in identifying inservice needs but this involvement

TABLE IV. THE EXTENT TO WHICH OCCUPATIONAL TEACHER PROFESSIONAL ASSOCIATIONS ARE INVOLVED IN IDENTIFYING INSERVICE NEEDS OF OCCUPATIONAL TEACHERS

Service Area	Number of Respondents	Professional Association Agenda Item[a]	Inservice Committee	Association Sponsored Surveys	Not Involved
Agriculture	10	6	6	2	2
Business	5	3	1	0	1
Distributive Education	7	3	0	1	4
Home Economics	4	2	0	1	2
Trade and Industrial	5	1	0	0	4
TOTALS	31	15	7	4	13

a. Inservice education was discussed at the annual occupational teacher's association meeting.

TABLE V. NUMBER OF OCCUPATIONAL TEACHER EDUCATION INSTITUTIONS SUBSIDIZING OCCUPATIONAL TEACHER PARTICIPATION IN INSERVICE PROGRAMS

Service Area	Number of Respondents	Subsidy	
		Yes	No
Agriculture	10	6	4
Business	5	3	2
Distributive Education	7	5	2
Home Economics	4	3	1
Trade and Industrial	5	3	2
TOTALS	31	20	11

TABLE VI. SUPPORT OCCUPATIONAL TEACHER EDUCATION INSTITUTIONS EXTEND TO OCCUPATIONAL TEACHERS AS ENCOURAGEMENT TO ATTEND INSERVICE PROGRAMS

		Method of Support				
Service Area	Number of Respondents Extending Support	Special Groups	Travel Allowance	Tuition Waiver	Per Diem	Stipend
Agriculture	6	3	3	1	2	3
Business	3	2	0	1	0	1
Distributive Education	5	2	3	2	2	0
Home Economics	3	2	0	2	0	0
Trade and Industrial	3	2	1	1	0	0
TOTALS	20	11	7	7	4	4

is, again, quite hit-and-miss. Monies are available to most occupational teacher education institutions for the purpose of promoting attendance at inservice programs. The money is used in diverse ways, notably to promote the attendance of special groups or to subsidize the attendance of a group of teachers studying a special problem. It seems fair to indicate that inservice programs would be more effective if additional energies were expended to isolate the inservice need of occupational teachers the programs serve.

Survey of State Education Departments (Occupational Division)

During August of 1972, the researcher contacted via open-ended questionnaire the Bureau of Occupational Inservice Education in twelve state education departments regarding their role in identifying then providing inservice education for occupational teachers. Responses were received from representatives of these bureaus in nine states (Appendix A).

All responding state education departments indicate it is their responsibility to determine then provide or coordinate the provision of inservice education for occupational teachers. Most emphasize it is a joint effort with other supervisory and occupational teacher education personnel in the state.

When asked how the state education department determines inservice education needs of occupational teachers, six of the nine states indicated they rely heavily on assessment surveys and supervisory assessment (observation). Four states rely on advisory groups for input regarding occupational teacher's inservice needs while three indicate joint conferences with teacher education personnel are important. One state education department indicated they review teacher records for certification voids while two states rely on administrators to relay the needs of their occupational teachers. Methods state education departments use are similar to those used by occupational teacher education institutions although state education departments seem to indicate less reliance on joint conferences.

The occupational inservice education bureaus perceive occupational teachers to be involved in identifying their own inservice needs. Six of the nine responding state bureaus indicate they periodically send surveys to occupational teachers; approximately half of the state bureaus indicate teachers have input through advisory committees and supervisors. One state indicated an opportunity for teachers to input their inservice requirements at state plan hearings. Some states have a systematic program of identifying occupational teacher need; others rely on occupational teacher education institutions to offer courses relative to occupational teacher inservice need. Very little reliance is placed on state level professional associations having input in determining occupational teachers inservice need. When asked if the state level professional association of each of the service areas was formally involved in determining occupational teacher inservice need, only two of the nine inservice bureaus answered positively. These data seem to indicate that cooperation with the occupational teachers professional associations offers an excellent avenue of increasing teacher input in the inservice need identification process.

All nine of the responding state occupational inservice bureaus indicated they provide some form of financial incentive to selected occupational teachers attending inservice programs. This aid takes the form of travel reimbursement, tuition waivers, or maintenance fees. General responses indicate this aid is quite limited; limitations taking the form of support ceilings, tuition waivers only if the program is provided off a college campus, support for only non-college credit courses, etc.

The surveyed state education departments regard themselves as being responsible for determining the inservice need of occupational teachers. All spend some energy, though in greatly varying amounts, to determine occupational teachers most pressing inservice need. Provision is then made for some form of monetary support to encourage occupational teachers attendance at identified need fulfillment programs. Respondents indicate a heavy reliance on college courses to satisfy inservice need with some indicating the utility of a more formal need-assessment program.

Performance-Based Teacher Education

> Probably no educational movement of recent times has shown so much promise as this application of a common principle--competency-based instruction--simultaneously to practice in the schools and to the education of teachers for the schools. The prospects for teacher education seem nothing short of phenomenal.[41]

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[41] Robert A. Howsam, Dean, College of Education, U. of Houston, Houston, Texas, A Resume of Performance-Based Teacher Education, AACTE PBTE Series 1-a, March 1972.

Performance- or Competency-Based Teacher Education[42] is developing into a viable movement to improve the professional preparation of educational personnel. The movement encompasses all levels of education[43,44] and prominently includes occupational teacher education. The competencies to be acquired are explicitly known to both learner and instuctor (teacher educator) and are defined in terms of the teacher's professional role. The learner is held accountable for attaining a given level of competency in performing the tasks of teaching, not for the traditional passing grades in specified college courses. The program designer (teacher educator) is held accountable for specifying, testing, and revising objectives as well as developing alternative learning experiences which facilitate student achievement of the objectives. The emphasis is away from the more traditional cognitive objectives (knowledge, intellectual abilities, and skills which are to be demonstrated by the learner) and toward performance objectives (whereby the learner demonstrates professional role behaviors) and eventually consequence objectives

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[42] The terms "performance-based" and "competency-based" are used interchangeably as descriptors for this teacher education movement.

[43] Allen A. Schmieder, Competency-Based Education: The State of the Scene, AACTE PBTE Series Number 9, AACTE, Washington, D.C., February 1973, pp. 28-48.

[44] Cottrell, et. al., op. cit., Reports I-V.

(demonstrated ability to bring about change in others).[45] In essence, the learner is accountable for attaining competence in teaching while the teacher education institution (and teacher educator) is held accountable for producing competent teachers.

There is general consensus regarding the characteristics of a performance-based teacher education program. The essential characteristics are: "(1) teaching competencies to be demonstrated are role-derived, specified in behavioral terms, and made public; (2) assessment criteria are competency-based, specify mastery levels, and made public; (3) assessment requires performance as prime evidence and takes student knowledge into account; (4) the student's rate of progress depends on demonstrated competency; and (5) the instructional program facilitates development and evaluation of specific competencies."[46] Many other characteristics are implied or are deemed desirable based on the observations of professional practitioners. Implied characteristics include the individualization, personalization, and modularization of instruction, feedback guiding the learning experience, emphasis on exit requirements, and the learner completing the program only

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45. W. Robert Houston, et. al., Resources for Performance-Based Education, published by The State Education Department, Division of Teacher Education and Certification, Albany, New York, March 1973, p. 1.

46. Stanley Elam, PERFORMANCE-BASED TEACHER EDUCATION: What is the State of the Art?, AACTE PBTE Series Number I, AACTE, Washington, D.C., December 1971, pp. 22-23.

after he demonstrates competencies identified as requisite for a particular professional role. Desirable characteristics include a program that is field-centered featuring both teacher educator and learner input in the design of the instructional system. See Diagram 1 for a complete version of the conceptual model.[47]

Acceptance of this model of performance-based teacher education is having and will continue to have great impact on teacher education institutions. They no longer expect automatic teaching certificates for their graduates, certification being granted only after competence is proven (with competence to be determined by an agency other than the teacher education institution). Any overlapping content, overemphasis on instructors' pet ideas, and abstract discourse would give way to a more systematic approach. The new approach involves management of the teacher education program in such a way that the institution is simultaneously dealing with all of the elements that comprise the teacher education program.[48]

A teacher education institution must be aware of the implications of a decision to develop performance-based

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[47] Ibid., pp. 7-11.

[48] W. Robert Houston, Strategies and Resources for Developing a Competency-Based Teacher Education Program, published by The State Education Department, Division of Teacher Education and Certification, and the Multi-State Consortium on Performance-Based Teacher Education, October 1972, p. 2.

Diagram I. Conceptual Model of Performance-Based Teacher Education.

ESSENTIAL ELEMENTS	IMPLIED CHARACTERISTICS	DESIRABLE CHARACTERISTICS
1. Teaching competencies to be demonstrated are role-derived, specified in behavioral terms, and made public.	1. Individualization	1. Field Setting
2. Assessment criteria are competency-based, specify mastery levels, and made public.	2. Feedback	2. Broad Base for Decision Making
3. Assessment requires performance as prime evidence, takes student knowledge into account	3. Systemic Programs	3. Protocol and Training Materials
4. Student's progress rate depends on demonstrated competency.	4. Exit Emphasis	4. Student Participation in Decision Making
5. Instructional program facilitates development and evaluation of specific competencies.	5. Modularization	5. Research-Oriented and Regenerative
	6. Student and Program Accountability	6. Career-Continuous
		7. Role Integration

field-oriented teacher education programs.[49] The administration must have a special commitment to resolving the problems associated with the field-centered aspects. The faculty must identify and organize competencies necessary for an outstanding teacher, assume the role of developer and coordinator of experiences and activities leading to the role of teacher, and be involved at both campus and field centers so theory and practice integrate. The student learner (prospective teacher) must be willing to be judged on his competence which entails a realistic appraisal of past experiences and selection of programs that build on already acquired competencies. Only through cooperation of students, faculty, and administration will this teacher education program work at its optimum level.

Teacher education institutions using a performance-based teacher education program report tentative observations indicating advantages over the traditional program. The University of Nebraska found that its secondary level teacher education students liked performance-based teacher education better than traditional instruction and were also able to achieve more. Cooperating teachers reported that student teachers completing the performance-based teacher education program used a wider range of teaching behaviors and employed more innovative practices than did student teachers who completed the traditional course sequence. University of Nebraska teacher education students generally found student teaching to be an excellent experience with education courses less well liked. Students who completed the performance-based program also found student teaching to be an excellent experience but many rated their performance-based experiences even better than student teaching.[50]

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[49] Frederick T. Giles and Clifford D. Foster, Changing Teacher Education in a Large Urban University, AACTE PBTE Series Number 6, AACTE, Washington, D.C., July 1972, pp. 13-16.

Weber State College started a performance-based teacher education program in 1970. Initial student reaction varied from enthusiasm to rejection. The faculty found a need to adjust from the traditional role of class leader and lecturer to advisor and consultant but made the transition successfully. Tentative conclusions regarding the Weber State program are: students and faculty are working harder than previously, students are learning more teaching skills than previously, the student-faculty relationship is friendlier and more cooperative, and students willingly accept and carry out responsibility for decisions concerning their own preparation.[51]

Performance-based teacher education is having great

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50. Ward Sybouts, "Performance-Based Teacher Education: Does It Make a Difference?," Phi Delta Kappan, Volume LIV, Number 5, January 1973, p. 303.

51. Caseel Burke, The Individualized, Competency-Based System of Teacher Education at Weber State College, AACTE PBTE Series Number 2, AACTE, Washington, D.C., March 1972, pp. 14-17.

impact on state education departments, especially as it concerns certification of teachers. Teachers have typically been certified after a review of college transcripts verified the successful completion of courses with specified titles plus the receipt of appropriate degrees. The assumption was (and is) that this bureaucratic process distinguished those persons who are qualified to perform as teachers from those not so qualified. Certification agencies have not been completely satisfied with this approach but have been reluctant to voice their misgivings due to uncertainities involved in a more direct form of teacher evaluation.[52] Recent pressures for credibility and accountability have, however, removed much of the reluctance and stimulated these professionals and agencies to aggressively seek new certification approaches. The approach sought by many is one of certification based on performance as well as consideration of educational attainment and knowledge. Addition of performance criteria is suppose to bridge the gap between theory and practice and provide more competent teachers.

New York State is one of the leaders in the performance-based certification movement, present plans being to move to the performance end of the certification continuum. Commissioner Nyquist[53] indicated the state education department's dissatisfaction with current certification practices when he said that "the present system of certification is archaic and really does not tell us much about the prospective competence of teachers. . . . future certification should depend on performance over a period of time . . ." The current goal is "to establish a system of certification by which the state can assure the public that professional personnel in the schools possess and maintain demonstrated competence to enable children to learn."[54] Developmental activities toward this goal include the funding of 12 trial projects to develop competency-based field-centered teacher education programs, participation in a multi-states consortium on competency-based teacher education, establishment of two competency-based education centers, and publication of a competency-based certification newsletter.

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[52] K. Fred Daniel, "Performance-Based Teacher Certification: What Is It and Why Do We Need It?," Performance-Based Certification of School Personnel, published by ERIC Clearinghouse on Teacher Education and the Association of Teacher Educators, Washington, D.C., February 1971, pp. 5-9.

Performance recertification is also receiving attention in some states. The Arizona Board of Education[55] indicates it has not found evidence linking teachers' experience and advanced degrees to student achievement; this dissatisfaction with current certification practices lead to funding a recertification model based on performance criteria. They indicate performance based recertification will cause an emphasis on viable inservice training, self-evaluation, and growth for every teacher of every child. If adopted, the effect on graduate level education will be profound. Performance recertification does not imply a lack of potential value in graduate level education courses; it does imply that graduate colleges of education will develop courses which teachers will demand because the content is needed. Courses depending on enrollment generated by the Board of Education certification requirements, rather than genuine teacher demand, will meet their just demise.

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[53] Performance-Based Teacher Education, published by Multi-State Consortium on Performance-Based Teacher Education, State Education Department, Albany, New York, Volume 1, Number 3, October 1972, p. 2.

[54] Schmieder, op. cit., p. 42.

[55] Performance-Based Teacher Education, published by Multi-State Consortium on Performance-Based Teacher Education, State Education Department, Albany, New York, Volume 1, Number 2, September 1972, p. 4.

Though there are questions which have not been satisfactorily answered about performance-based teacher education, especially those dealing with a valid criteria for evaluating effectiveness and those regarding the relationship between teacher behaviors and pupil learning, there are a number of advantages in using it.[56] Among the more promising are its attention to individual needs and abilities; its focus on objectives; its emphasis on the sharing process by which objectives are formulated and used as a basis for evaluation;

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[56] Elam, op. cit., p. 14.

its efficiency, enhanced by feedback; and accountability for both program and students.

Summary

The review of related literature and current practices disclosed several important factors regarding inservice education for occupational educators. It was agreed that preservice education programs are inadequate to meet the lifetime professional needs of occupational teachers. The quality of inservice programs varied greatly, but there was a consistent concern that inservice education be revitalized if occupational teacher education was to show fundamental improvement.[57] The Fleischmann Commission[58] strongly stressed the need for inservice education in New York State, recommending that inservice programs focus special attention on the preparation of teachers so they acquire the abilities necessary to solve problems they encounter in their employing school systems.

The performance-based teacher education movement is viable and attracting an increasing number of proponents. While there are recognized concerns yet to be resolved, the potential advantages render this one of the most promising educational movements of recent times. Since the movement is quite young, the extent and depth of its impact are yet to be determined.

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[57] Virgil Lagomarcino, "The Preparation of Teachers: Some Concerns and Challenges," Third Annual Vocational-Technical Teacher Education Seminar, sponsored by The Center for Vocational and Technical Education, The Ohio State University, Columbus, Ohio, January 1970, p. 27.

[58] New York State Commission on the Quality, Cost, and Financing of Elementary and Secondary Education (Fleischmann), *op. cit.*, pp. 55-56.

This research combined occupational teachers need for inservice education, the belief that occupational teachers should be maximally involved in identifying their inservice need, and the performance-based teacher education movement. It was felt the combination of these elements would facilitate the development of an inservice program that offers occupational teachers inservice education which will assist them in resolving their most pressing problems.

A final note, this researcher and others[59] found research on inservice education disappointingly scanty for a program that has been an integral part of teacher education for many years.

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[59] George W. Denemark and James B. MacDonald, "Inservice Education," Review of Educational Research, Volume 37, Number 3, June 1967, p. 240.

CHAPTER III

METHOD OF INVESTIGATION

Study Boundaries

The study was limited to BOCES occupational centers and upstate vocational high schools. It was realized that resource limitations prevented studying occupational educators in all possible school settings. BOCES occupational centers and upstate vocational high schools were selected for several reasons, the principal one being a trend toward expanded programs in New York State occupational centers and the heterogeneity of occupational teachers located there. Figure 1 identifies the location of the centers. Center names and addresses are listed in Appendix C.

Tentative Performance Statements

The researcher decided to use performance-based pedagogical statements as the vehicle by which data would be gathered. A review of research and literature provided many studies relating to the pedagogical needs of occupational educators. Beamer[60] gathered data on the importance of

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60. Rufas W. Beamer, Reconstruction of the Undergraduate Professional Courses in Agricultural Education at the University of Tennessee, Ed.D. Thesis, Urbana, Illinois: The University of Illinois, 1956.

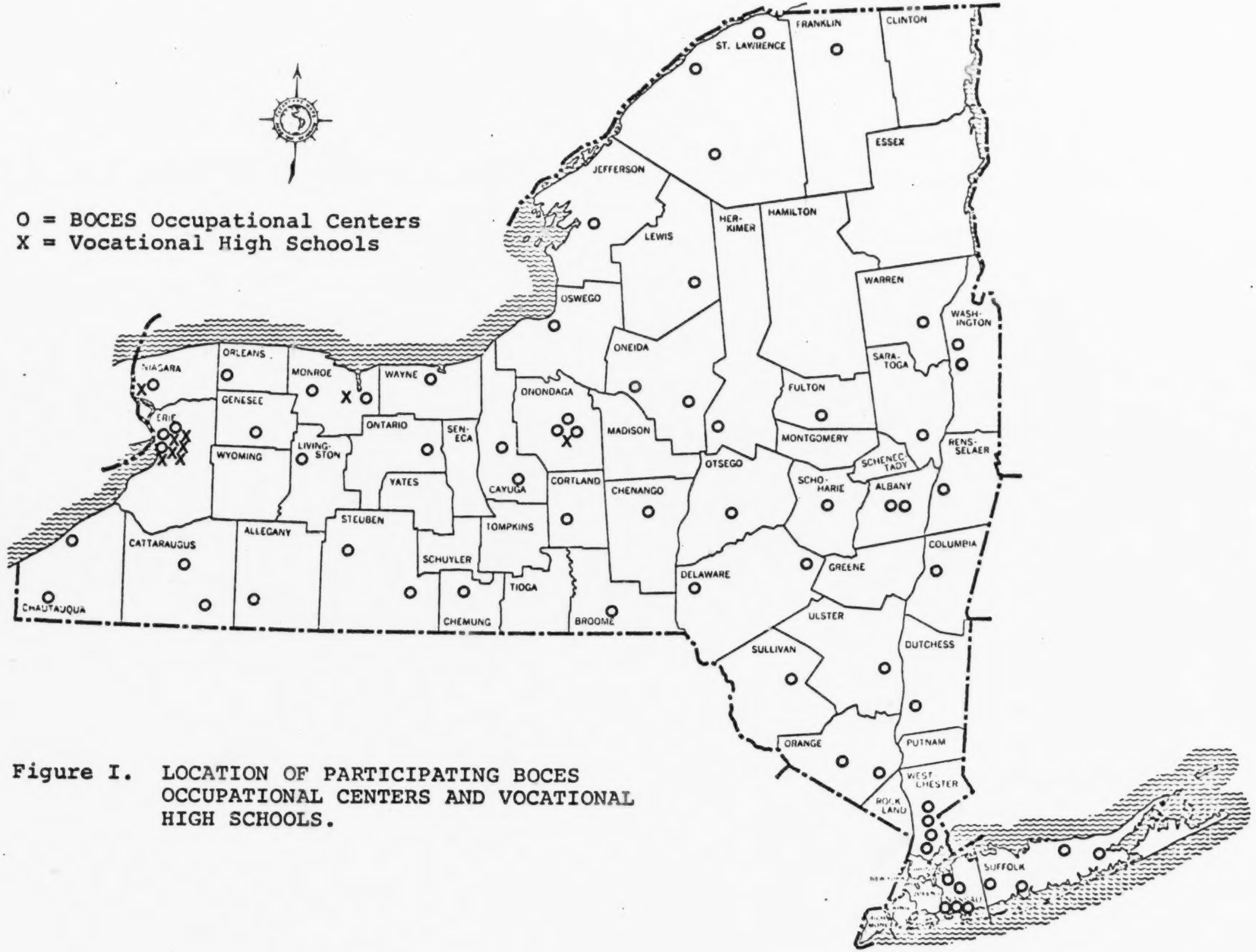
O = BOCES Occupational Centers
X = Vocational High Schools
ST. LAWRENCE
FRANKLIN
CLINTON
ESSEX
JEFFERSON
LEWIS
HER-KIMER
HAMILTON
WARREN
WASH-INGTON
OSWEGO
ONEIDA
SARA-TOGA
FULTON
MONTGOMERY
SCHENEC-TADY
RENS-SELAER
NIAGARA
ORLEANS
MONROE
WAYNE
ONONDAGA
MADISON
GENESEE
ERIE
ONTARIO
SEN-ECA
WYOMING
LIVING-STON
YATES
CAYUGA
CORTLAND
CHENANGO
OTSEGO
SCHO-HARIE
ALBANY
STEUBEN
ALLEGANY
CATTARAUGUS
TOMPKINS
COLUMBIA
SCHUYLER
GREENE
DELAWARE
CHAUTAUQUA
TIOGA
CHEMUNG
BROOME
ULSTER
DUTCHESS
SULLIVAN
ORANGE
PUTNAM
WEST-CHESTER
ROCK-LAND
SUFFOLK

Figure I. LOCATION OF PARTICIPATING BOCES OCCUPATIONAL CENTERS AND VOCATIONAL HIGH SCHOOLS.

specified abilities in teaching vocational agriculture. Crawford[61] identified the pedagogical competencies needed by distributive education teacher-coordinators. Courtney[62] developed an instrument containing 200 occupational educator pedagogical competency statements. Cotrell et. al.[63] identified the pedagogical performance requirements of occupational teachers. The Department of Vocational and Applied Arts Education at Wayne State University[64] developed a model for competency-based instruction. The Texas Education Agency[65] conducted a statewide study to identify common and unique teaching skills in occupational education. The last two studies cited used as their foundation the Model Curricula for Vocational and Technical Teachers study

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[61] 61. Lucy C. Crawford, A Competency Pattern Approach to Curriculum Construction in Distributive Teacher Education, sponsored by the U.S. Office of Education, Blacksburg, Virginia: Virginia Polytechnic Institute, 1967.

[62] 62. E. Wayne Courtney, Implications for the Training of Teachers: Professional Education Preparation and Requirements, Menominee, Wisconsin: Stout State University, 1965.

[63] 63. Cotrell, op. cit., Reports I-V.

[64] 64. Fred S. Cook (director), Competencies and Performance Objectives, Department of Vocational and Applied Arts Education, Wayne State University, Detroit, Michigan, September 1972, p. 105.

[65] 65. Billy N. Pope (project director), Search for Common and Unique Teaching Skills and Knowledge in Occupational Education and Technology at the Secondary and Post-Secondary Levels Combined, Division of Occupational Research and Development, Department of Occupational and Technical Education, Texas Education Agency, Austin, Texas, 1972, p. 254.

(Cotrell) conducted by The Center for Vocational and Technical Education. Since the Model Curricula Project proved useful to other researchers and had educed ideas from the previously mentioned studies, it was felt the pedagogical performance statements developed could be successfully utilized as the principal basis for this study.

The tentative statements were grouped in categories and clusters similar to the classification system used in the Model Curricula Project. Minor modifications and reclassifications were accomplished to more readily accommodate the New York State situation.

Jury of Consultants

The tentative list of performance statements, though already indicated to be important for occupational educators by the Model Curricula Project and Texas Education Agency study, was subjected to a review by a jury of occupational educators. The jury consisted of the following: the administrator of a BOCES occupational program, two Bureau Chiefs in the New York State Education Department, one occupational teacher educator in New York State, and two occupational teacher educators outside New York State (Appendix D). In addition, Cotrell and his associates at the Center for Vocational-Technical Education were contacted via letter and in person.

It was felt the consultants could refine and clarify the performance statements and give direction to instrument design. After thorough review, they suggested no major revisions in the performance statements but did suggest design improvements from the tentative instrument. Most of the suggestions regarded scaling of the instrument and clarity of wording. Appropriate revisions were incorporated into the final instrument.

Sample

Population and Sample Identification

The research decision to utilize teachers in occupational centers and upstate vocational high schools as the population necessitated the researcher securing agreement of participation from the administrator of each school. A letter requesting cooperation (Appendix B) was sent to the director of occupational education at each of the occupational centers and vocational high schools. The 1971-72 and 1972-73 Directories of New York State Vocational Education Personnel[66] were utilized to secure appropriate names, titles, and addresses. The letter explained the purpose of the study and contained an attached pre-addressed and pre-paid instrument which verified willingness to cooperate (Appendix B). In addition, the letter solicited the name and title of the supervisor in each school who was most knowledgeable of the occupational teacher's professional competence. After follow-up by letter and/or phone, the directors of all occupational centers and vocational high schools agreed to have their faculties participate.

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[66] Directory of New York State Vocational Education Personnel, sponsored by the Institute for Occupational Education, Cornell University, Ithaca, New York. Prepared by The Department of Vocational-Technical Education, State University College, Oswego, New York, 1971-72 and 1972-73, p. 144.

The researcher prepared a master list showing the names of all occupational teachers in participating schools segregated via school and service area. Realizing 100 percent return was impossible, and being unable to project the percent useable returns with any assurance, the researcher chose to draw large sample sizes from each service area. Additional research interest in analyzing the data via subjects taught within service areas promoted the selection of a large sample. The data in Table VII indicate the population and sample drawn.

Sample Selection

For three of the six service areas, the sample would include the total population; for the other service areas, the sample would range from twenty to eighty-three percent of the population. Each teacher in the service areas where the sample was less than the population was assigned a number for sample selection purposes. Using a table of random numbers, individual teachers were then selected until the desired sample size was obtained.

TABLE VII. POPULATION OF OCCUPATIONAL EDUCATORS IN BOCES CENTERS AND UPSTATE VOCATIONAL HIGH SCHOOLS AND SAMPLES DRAWN

Service Area	Population	Sample Drawn	Possible Respondents Per Instrument Item[a]
Agriculture	111	111	36
Business	144	120	40
Distributive Education	29	29	14
Health	243	150	50
Home Economics	57	57	28
Trade and Industrial	1064	210	70
TOTALS	1648	677	238

a. Each respondent in agriculture, business, health, and trade and industrial completed six pages of the eighteen page instrument; distributive education and home economics respondents completed nine pages of the eighteen page instrument.

The researchers felt the 19 page instrument was too voluminous for any one occupational teacher to complete so decided to divide the instrument into parts. Teachers in four service areas were sent one-third of the total instrument and teachers in the two service areas with a much smaller population were sent half of the total instrument. For each of the service areas, a number was selected at random to determine which part of the instrument the first teacher in each service area would receive. Other teachers in each service area list were systematically assigned the next part of the instrument (example--the first agriculture teacher was randomly assigned part two of the instrument, the second agriculture teacher received part three, the third agriculture teacher received part one, the fourth agriculture teacher received part two, etc.). This procedure had two advantages: it assured even distribution of the different parts of the instrument within each service area and it promoted optimum variation in the parts of the instrument received by teachers in any one school.

The researcher desired to have the supervisor at each occupational school rate one occupational teacher as a method of correlating teacher and supervisor perception of inservice need. After the total sample was selected, the participating teachers were segregated via school. One teacher from each school was then randomly selected and assigned to the supervisor (Appendix B). All instruments were coded to eliminate the use of names and all respondents were assured confidentiality.

Field Testing

Since the performance statements comprising the research instrument were found to be important for occupational teachers by other researchers and had additionally been subjected to a jury of occupational consultants, it was felt a field test with limited objectives was required. Accordingly, the instrument was administered to occupational education graduate students to check clarity of instructions, clarity of performance statements, and time required to complete the instrument.

Final Instrument

The final instrument incorporated suggestions of the jury of consultants and the field test panel of occupational educators. The instrument was typed on eight and one-half inch by fourteen inch paper and photographically reduced and printed on normal size reproduction paper. This process permitted most of the performance statements to be typed on one line and kept the instrument to eighteen pages.

A nine digit code was developed to identify the computer cards, teacher, part of the instrument each teacher/supervisor was sent, teacher/supervisor status, and school. Computer card column numbers were typed on the right margin of the instrument to facilitate coding. The instrument and instructions for its use are presented in Appendix E.

Instrument Administration

The instruments for all participating teachers in a school were individually packaged then mailed en masse to the supervisor for distribution. The packages were individually addressed and included a cover letter explaining the project, instructions, and the appropriate part of the instrument. The supervisor received a cover letter explaining the project and assigning the occupational teacher to be rated, instructions for instrument completion, and the appropriate part of the instrument. Names, addresses, and an identification code for each teacher and supervisor were typed on labels and reproduced to facilitate follow-up.

The occupational teachers and supervisors were requested to administer their own instrument (Appendix E) and return it in the stamped, self-addressed envelope enclosed. Exactly two weeks after the original instruments were mailed, a modified form follow-up letter was mailed to all non-responding teachers. A personal follow-up letter was mailed to all supervisors three weeks after mailing the original package with a second follow-up personal letter being sent to non-responding teachers four weeks after mailing the original package. The second follow-up personal letter to teachers contained a coded, pre-paid, pre-addressed postcard requesting a teacher response if the instrument had not been received or had been inadvertently misplaced. The original and follow-up letters can be seen in Appendix B.

The instruments were coded, contained no names, and respondents were assured of confidential treatment of their response. Both cover letters and follow-up letters reminded respondents of the confidentiality of their response.

Plan for Data Analysis

Returns

Data in Table VIII summarize the research instruments mailed and returned by each sample group. Of the 677 instruments mailed, 549 or over 80 percent were returned. The percent return varied only slightly across service areas, business teachers having the lowest return (73%) and home economics teachers having the highest return (90%). It should be noted that of the two groups receiving one-half of the instrument, the home economics teacher group returned the highest percent of all six service area groups with the distributive education teacher group returning slightly less than the total sample average percent return. This response leads the researcher to conclude the length of instrument respondents completed had little or no effect on rate of return. The overall return of 80 percent was considered an excellent response.

Seventy supervisors were sent instruments to use in rating their assigned occupational teacher. Sixty-four of the supervisors returned useable instruments with one returning his instrument too late to be used. The 65 instruments or 93 percent return was also considered by the researcher to be an excellent response. It should be noted that the majority of the unuseable instruments were either returned too late to be used or were from teacher aides.

TABLE VIII. NUMBER AND PERCENT OF INSTRUMENTS MAILED TO AND RETURNED BY RESPONDENT GROUPS

Service Areas	Sample[a]	Instruments Returned	Unuseable[b] Instruments Returned	Useable Instruments Returned	Percent Useable Instruments Returned	Percent Instruments Returned
Agriculture	111	94	3	91	82	83
Business	120	88	2	86	72	73
Distributive Education	29	23	2	21	72	79
Health	150	122	10	112	75	81
Home Economics	54	49	6	43	80	90
Trade and Industrial	213	173	11	162	76	81
TOTALS	677	549	34	515	76	80+

a. The sample varies slightly from that shown in Table VII. Three teacher respondents originally classified as under home economics listed themselves as trade and industrial teachers on their instrument and were reclassified.

b. Instruments were classified unuseable for the following reasons: received too late to be included in data analysis, respondents were teacher aides--not teachers as originally thought, or the respondent failed to follow instructions.

Data Preparation

Instruments were coded as they arrived. Keypunch operators placed the data on IBM cards for later analysis utilizing the instrument as the source for their keypunch operation. The researcher prepared detailed instructions for a research methodologist and hired him to develop a computer program that would facilitate data analysis.

The cover letter to each respondent requested that he/ she add any inadvertently omitted performance elements. The number of respondents adding performance elements was small and is listed in Appendix H.

Planned Analysis

The demographic data for teachers and supervisors were tabulated in numbers and percentages and are presented at the beginning of Chapter IV.

A scale was developed assigning numbers to the terms as follows: IMPORTANCE LEVEL--"1" equals "Low," "2" equals "Below Average," "3" equals "Above Average," and "4" equals "High"; PERFORMANCE LEVEL--"1" equals "High," "2" equals "Above Average," "3" equals "Below Average," and "4" equals "Low." The average importance level and performance level would be a rating of 2.50 on each scale.

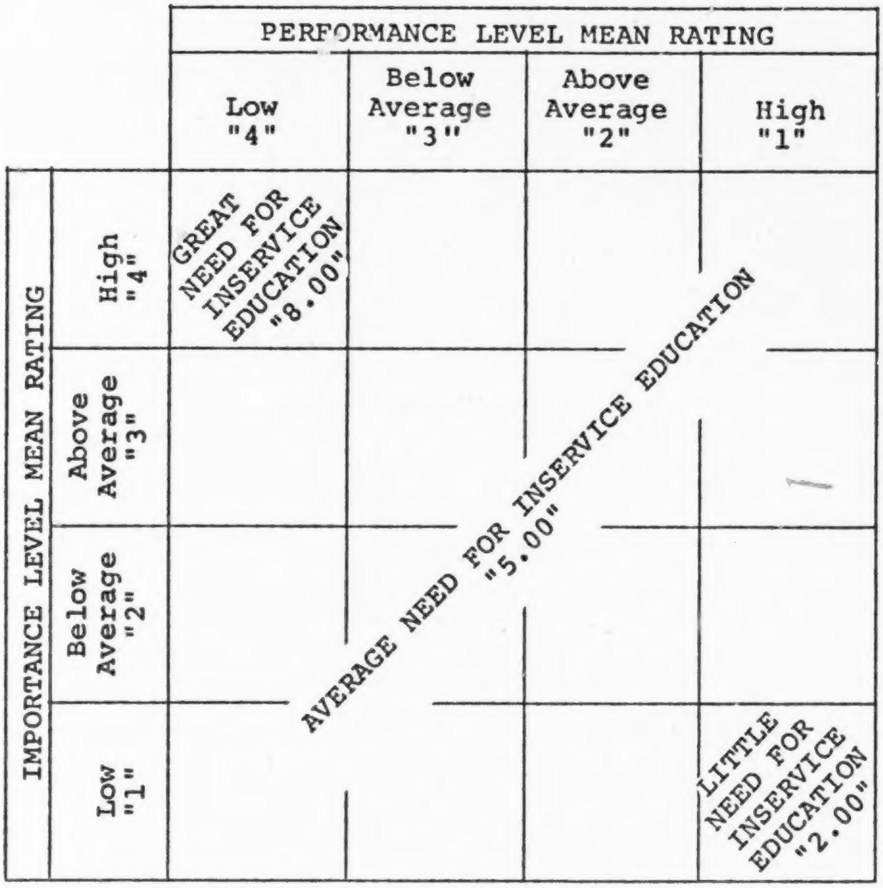
Means were computed on the performance element response of occupational teachers in each of the service areas. A mean rating of 2.25 or above by occupational teachers in any service area group indicated the service area considered the performance element important in fulfilling their responsibilities as occupational teachers. If occupational teachers in all six service areas gave the performance element a mean rating of 2.25 or above, the performance element was considered to have importance for all secondary level occupational teachers. Performance elements receiving a mean rating of more than 2.25 by occupational teachers in one through five service areas were considered to have unique importance to some occupational teachers but not common importance to all occupational teachers. Performance elements receiving a mean rating of less than 2.25 from occupational teachers in all six service area groups were considered to have little or no importance.

The ratings occupational teachers gave performance elements comprising a cluster were utilized to calculate the mean importance occupational teachers in each service area attach to each cluster. A weighted mean was calculated to determine the importance occupational teachers attach to the cluster. In addition, the one-way analysis of variance was calculated to ascertain if there was any significant difference in importance attached to clusters by the different service area groups. The occupational teachers rated their performance at cluster level so service area mean ratings, a weighted mean for occupational teachers, and the one-way analysis of variance were calculated. The inservice need indicator was determined by adding the importance and performance mean rating for each service area. A weighted inservice need indicator mean was calculated as was the one-way analysis of variance. For importance, performance, and the inservice need indicator, the weighted mean indicated the rating attached by occupational teachers and the one-way analysis of variance was used to determine if significant differences exist between service area occupational teacher ratings.

The following schematic (Diagram II) was designed to assist the researcher in calculating the inservice need indicator. An inservice need indicator of "8.00" indicates the greatest possible need for inservice education in a specified cluster with a rating of "2.00" indicating little or no need for inservice education. The higher the inservice need indicator, the greater the need for inservice education.

From each participating occupational school, an occupational teacher was randomly selected and assigned to his/her immediate supervisor. The supervisor gave both an IMPORTANCE LEVEL and PERFORMANCE LEVEL rating for his assigned teacher. The importance level rating indicated the supervisor's recommendation on the importance of each performance element in successfully fulfilling the responsibilities of an occupational teacher in the assigned teacher's specialization. The performance level rating indicated the supervisor's evaluation of the assigned teacher's performance relative to the supervisor's perception of optimum performance by an

DIAGRAM II. PARADIGM FOR DETERMINING INSERVICE NEED


PERFORMANCE LEVEL MEAN RATING
Low "4"
Below Average "3"
Above Average "2"
High "1"
IMPORTANCE LEVEL MEAN RATING
High "4"
Above Average "3"
Below Average "2"
Low "1"
GREAT NEED FOR INSERVICE EDUCATION "8.00"
AVERAGE NEED FOR INSERVICE EDUCATION "5.00"
LITTLE NEED FOR INSERVICE EDUCATION "2.00"

occupational teacher in the assigned teachers specialization. Teachers and supervisors were cautioned not to intentionally inflate or deflate their ratings. (See Instructions in Appendix E.)

To ascertain the level of agreement between occupational teacher ratings and the ratings of their supervisors, correlations were calculated at the cluster level for importance, performance, and inservice need. The correlations were determined to give insight as to the amount of agreement between occupational teachers and their supervisors regarding the importance of identified performance elements, occupational teacher performance on each cluster of performance elements, and occupational teachers need for inservice education in the pedagogical domain.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Demographic Data

The first section of this chapter contains a general description of occupational teacher and occupational supervisor respondent groups. The second section includes a presentation and discussion of data on occupational teacher inservice need with the material organized into categories identical to those of the research instrument. The third section includes a presentation and discussion of data on the correlation of occupational teacher and supervisor perceptions and observations regarding pedagogical performance statements.

Occupational Teachers

Information in Table VII indicated that from the sample of 677 occupational teachers, a 100 percent return would yield 238 responses to any performance element or cluster on the instrument. Returns of approximately 80 percent yielded a distribution of instruments as indicated in Table IX. The number of returns for each category of the research instrument was quite evenly distributed. Categories one, two, and three received 181 returns; categories four and five received

TABLE IX. NUMBER OF TEACHERS BY SERVICE AREA RESPONDING TO INDICATED PARTS OF THE RESEARCH INSTRUMENT

	Research Instrument				
Service Area	Part 1[a]	Part 2[b]	Part 3[c]	Part 4[d]	Part 5[e]
Agriculture	29	33	29	NA	NA
Business	27	31	28	NA	NA
Distributive Education	NA	NA	NA	10	11
Health	40	36	36	NA	NA
Home Economics	NA	NA	NA	23	20
Trade and Industrial	52	60	50	NA	NA

a. Occupational teachers receiving Part 1 responded to Categories A, B, and C of the research instrument.

b. Occupational teachers receiving Part 2 responded to Categories D, E, F, and G of the research instrument.

c. Occupational teachers receiving Part 3 responded to Categories H, I, and J of the research instrument.

d. Occupational teachers receiving Part 4 responded to Categories A, B, C, D, and E of the research instrument.

e. Occupational teachers receiving Part 5 responded to Categories F, G, H, I, and J of the research instrument.

193 returns; categories six and seven received 191 returns; and categories eight, nine, and ten received 174 returns.

Males constitute 55 percent and females 45 percent of the occupational teacher respondent group. The distribution within service areas is predominantly male or predominantly female with the exception of an evenly divided business group. This distribution is not surprising as a review of course offerings (Appendix F) reveals that many if not most courses are oriented toward traditionally male or female occupations. The gender of occupational teachers in the six service areas is summarized in Table X.

TABLE X. SEX OF RESPONDING OCCUPATIONAL TEACHERS

Service Area	Number of Respondents	Female Number	Female Percent	Male Number	Male Percent
Agriculture	91	3	03	88	97
Business	86	45	52	41	48
Distributive Education	21	6	29	15	71
Health	112	110	98	2	02
Home Economics	43	43	100	0	00
Trade and Industrial	162	25	15	137	85
Number of Respondents	515	231		283	
Percent of Respondents			45		55

The age of responding occupational teachers is reported in Table XI. The overall age pattern is quite evenly distributed between ages 20 and 60 with only 4 percent of the responding occupational teachers 60 years of age or older. Very few health and trade industrial teachers are between the age of 20 and 29. Teachers in both of these service areas have completed more related occupational work experience than

TABLE XI. AGE OF RESPONDING OCCUPATIONAL TEACHERS

Service Area[a]	Number of Respondents	Percent of Teachers Reporting Age Levels				
		20-29	30-39	40-49	50-59	60+
Agriculture	91	34	26	20	16	03
Business	86	22	34	24	17	02
Distributive Education	21	43	29	19	10	00
Health	112	08	23	42	22	04
Home Economics	43	28	14	21	30	07
Trade and Industrial	162	05	25	41	24	05
Number	515	88	132	165	109	21
Percent		17%	26%	32%	21%	04%

a. Service area lines may not equal 100 percent due to rounding of percents.

teachers in other service areas. In addition occupational teachers in health and trade and insutry normally come from industry and have not completed a 4 year collegiate teacher preparation program. Since they come from the professions or industry having significant work experience, they're entering teaching at a later stage in their professional career.

With the exception of health and trade and industrial teachers, the overwhelming majority of occupational teachers have completed at least a bachelors degree. As reported in Table XII, 95 percent of the responding distributive education

TABLE XII. HIGHEST LEVEL OF FORMAL EDUCATION COMPLETED BY RESPONDING OCCUPATIONAL TEACHERS

Service Area[a]	Percent No Response	Percent Teachers Completing Each Degree				
		Less Than Two Years College	AAS Degree But Less Than Bachelors	Bach-elors Degree	Masters or Equiv.	Post-Masters
Agriculture	00	02	11	38	33	15
Business	00	09	16	28	35	12
Distributive Education	00	00	05	52	38	05
Health	00	11	38	37	12	03
Home Economics	02	09	09	42	28	09
Trade and Industrial	02	20	46	16	14	02
Number	4	58	147	155	115	35
Percent	01%	11%	29%	30%	22%	07%

a. Service Area lines may not equal 100 percent due to rounding of percents.

teachers have at least a bachelors degree. Seventy-five percent of the business teachers, 82 percent of the home economics teachers, and 87 percent of the agriculture teachers report at least a bachelors degree. Over 40 percent of the responding agriculture, business, and distributive education teachers report at least a masters degree with 37 percent of the home economics teachers reporting this level of format education. Graduate degrees held by health and trade and industrial teachers, however, are significantly lower at 15 percent for health and 16 percent for trade and industrial.

Semester hours of professional education completed by occupational teachers is summarized in Table XIII with the majority reporting over 18 semester hours excluding student teaching. It was not surprising that approximately 80 percent had completed 13 or more semester hours of professional education as 12 hours is the minimum level that must be completed prior to securing provisional certification. Persons certifying via routes other than the four-year baccalaureate program must complete a minimum of 18 semester hours.

Occupational teachers were asked to indicate their participation in a college-supervised student teaching experience and these data are summarized in Table XIV. Slightly over half of those responding indicated they have completed a college supervised student teaching program. The range between service areas is quite varied with 70 percent of the home economics teachers reporting completion of student

TABLE XIII. SEMESTER HOURS PROFESSIONAL EDUCATION (NOT COUNTING SUPERVISED STUDENT TEACHING) COMPLETED BY RESPONDING OCCUPATIONAL TEACHERS

Service Area[a]	Number of Respondents	Percent Teachers Completing Levels Professional Ed				
		No Answer	6 Hours or Less	7-12 Hours	13-18 Hours	Over 18 Hours
Agriculture	91	04	08	19	18	52
Business	86	01	13	08	15	63
Distributive Education	21	00	10	19	33	38
Health	112	05	10	07	15	63
Home Economics	43	02	00	09	16	72
Trade and Industrial	162	04	09	04	06	78
Number	515	18	45	46	70	336
Percent		03%	09%	09%	14%	65%

a. Service area lines may not equal 100 percent due to rounding of percents.

teaching and only 38 percent of the business teachers reporting such experience.

TABLE XIV. PERCENT OF RESPONDING OCCUPATIONAL TEACHERS WHO HAVE COMPLETED A COLLEGE SUPERVISED STUDENT TEACHING EXPERIENCE

		Completed Supervised Student Teaching		
Service Area[a]	Number of Respondents	Yes	No	No Answer
Agriculture	91	48	51	01
Business	86	52	47	01
Distributive Education	21	38	62	00
Health	112	43	54	03
Home Economics	43	70	28	02
Trade and Industrial	162	56	41	04
Number	515	265	238	12
Percent		51%	46%	02%

a. Service area lines may not equal 100 percent due to rounding of percents.

Fifty percent of the responding occupational teachers have taught 5 years or less. Each of the service areas report between 44 and 52 percent of their teachers having 5 or less years teaching experience with the exception of distributive education which reports 66 percent. The oldest staffs in terms of teaching experience are home economics and agriculture with 24 percent of the home economics teachers and 17 percent of the agriculture teachers reporting over 15 years teaching experience. Seven percent or less of the staffs in the other service areas report this level of experience. The data summarizing teaching experience are tabulated in Table XV.

The years of related work experience reported by occupational teachers is summarized in Table XVI. There is tremendous variation in years of work experience reported by the different service area teacher groups. Eighty-seven percent of the trade and industrial teachers report 6 or more years of work experience and 75 percent of the health teachers report this level. Agriculture, business, and distributive education report approximately 50 percent of their teachers as having over 5 years of work experience with 38 percent of the home economics teachers having work experience of 6 or more years. Six percent of the occupational teachers report no related work experience.

Occupational Supervisors

There were 77 occupational schools participating in the study with occupational supervisors being responsible for teachers at more than one school in a few instances. In total, there were 70 supervisors responsible for occupational teacher supervision at the 77 occupational schools. Sixty-five of the 70 supervisors returned research instruments with one arriving too late to be included in the study. A total

TABLE XV. YEARS TEACHING EXPERIENCE REPORTED BY OCCUPATIONAL TEACHERS

Service Area[a]	Number of Respondents	Percent Teachers Reporting Years Teaching Exp.								
		1	2	3	4	5	6-10	11-15	16-20	20+
Agriculture	91	11	10	07	05	15	24	11	03	14
Business	86	09	08	08	09	10	35	13	02	05
Distributive Education	21	19	14	19	10	04	24	10	00	00
Health	112	11	11	07	12	09	36	09	05	01
Home Economics	43	05	12	16	12	05	21	07	12	12
Trade and Industrial	162	08	14	07	10	13	33	09	02	04
Number	515	49	59	43	50	56	159	50	20	29
Percent		10%	11%	08%	10%	11%	31%	10%	04%	06%

a. Service area lines may not equal 100 percent due to rounding of percents.

TABLE XVI. YEARS RELATED OCCUPATIONAL EXPERIENCE REPORTED BY OCCUPATIONAL TEACHERS

Service Area[a]	Number of Respondents	Percent Teachers Reporting Years Work Experience						
		No Answer	None	1-5	6-10	11-15	16-20	20+
Agriculture	91	01	11	38	21	08	08	13
Business	86	00	12	38	17	12	05	16
Distributive Education	21	00	00	52	10	19	10	10
Health	112	01	02	22	16	17	13	29
Home Economics	43	00	19	44	12	07	05	14
Trade and Industrial	162	01	01	06	12	25	22	33
Number	515	3	32	133	78	84	66	119
Percent		01%	06%	26%	15%	16%	13%	23%

a. Service area lines may not equal 100 percent due to rounding of percents.

of 64 occupational supervisors comprised the supervisory group.

The modal age of occupational supervisors is 40-49 years as indicated in Table XVII. There are no supervisors under the age of thirty and only one over the age of sixty. Sixty of the sixty-four supervisors were male.

TABLE XVII. AGE OF OCCUPATIONAL SUPERVISORS

Age in Years	Number of Respondents	Percent of Respondents[a]
20-29	0	00
30-39	19	30
40-49	27	42
50-59	17	27
60 and Over	1	02
	64	101%

a. The percent column does not equal 100 percent due to rounding of percents.

Eighty-six percent of the occupational supervisors have completed at least a masters degree with 40 of the 55 masters degree recipients having completed post-masters study. Only two of the 64 supervisors had not completed the bachelors degree. Data on the formal education of occupational supervisors are summarized in Table XVIII.

TABLE XVIII. HIGHEST LEVEL OF FORMAL EDUCATION COMPLETED BY RESPONDING OCCUPATIONAL SUPERVISORS

Minimum Level of Formal Education	Number of Respondents	Percent of Respondents
Less Than Bachelors Degree	2	03
Bachelors Degree	7	11
Masters Degree	15	23
Post-Masters Study	40	63
	64	100%

All responding occupational supervisors have teaching experience, over 60 percent of them having greater than 10 years. Approximately half have five or less years of administrative/supervisory experience with 89 percent having ten or less years administrative/supervisory experience. The data summarizing teaching and administrative/supervisory experience are found in Table XIX.

Supervisors were asked to indicate how often they observed their assigned occupational teacher's professional classroom/laboratory performance during an academic year. Answers varied greatly, four indicating they observe only once per year while 11 observe nine or more times. The modal response was 3 observations per academic year. Data on frequency of observation are summarized in Table XX.

TABLE XIX. YEARS OF TEACHING AND ADMINISTRATIVE/SUPERVISORY EXPERIENCE POSSESSED BY RESPONDING OCCUPATIONAL SUPERVISORS

Years	Teaching Number	Teaching Percent	Administrative/ Supervisory Number	Administrative/ Supervisory Percent[a]
No Answer	0	00	2	03
None	0	00	NA	NA
One through Five	10	16	28	44
Six through Ten	14	22	29	45
Eleven through Fifteen	16	25	3	05
Sixteen through Twenty	15	23	1	02
Over Twenty	9	14	1	02
	64	100%	64	101%

a. The percent column does not equal 100 percent due to rounding of percents.

TABLE XX. FREQUENCY WITH WHICH OCCUPATIONAL SUPERVISORS OBSERVED THEIR ASSIGNED TEACHER'S CLASSROOM/ LABORATORY PERFORMANCE PER ACADEMIC YEAR

Observations	Number of Respondents	Percent of Respondents[a]
No Answer	3	05
1	4	06
2	12	19
3	14	22
4	7	11
5	8	13
6	2	03
8	3	05
9 or more	11	17
	64	101%

The duration of each observation reported by occupational supervisors is summarized in Table XXI. The data in Table XX showed that the number of supervisory observations varied greatly; so did the length of each observation. The length ranged from less than 10 minutes to over 80 minutes per observation. The modal response of 40-49 minutes was also the mean (calculating the three 80 minute and over responses as 80 minutes) response. If there was a typical occupational supervisor, he probably observes his teachers between 3 and 4 times per academic year for 35 to 40 minutes per observation.

TABLE XXI. DURATION OF EACH SUPERVISORY OBSERVATION

Length of Observation (minutes)	Number of Respondents	Percent of Respondents[a]
No Answer	3	05
Less than 10	3	05
10 through 19	9	14
20 through 29	11	17
30 through 39	8	13
40 through 49	14	22
50 through 59	1	02
60 through 69	11	17
70 through 79	1	02
80 and over	3	05
	64	102%

a. The percent column does not equal 100 percent due to rounding of percents.

Occupational Teacher's Professional Education Inservice Need

Occupational teachers professional education inservice needs are presented via categories in the same order and with the same numbering system as used on the data collection instrument. A table has been developed for each cluster of performance elements. The table contains professional education inservice need indicator data at the cluster level plus the weighted performance element mean and an importance classification at the performance element level.

The inservice need indicator data were obtained by adding the importance response of occupational teachers in each service area to their perceived performance level. As explained in the planned analysis section of Chapter III, a "Low" level of importance was given a "1" value with a "High" level of importance receiving a "4" value; a "Low" level of performance received a "4" value with a "High" level of performance receiving a "1" value. An inservice need indicator of "8.00" indicated high importance and low performance; an inservice indicator of "2.00" indicated low importance and high performance. At the cluster level (A-1, A-2, etc.), the inservice need indicator for each service area and the overall weighted mean (W.Mean) are based on the 2.00-8.00 inservice need indicator scale. [Refer to Chapter III for a more detailed discussion.]

The F value is significant at the following levels:

3.14 at the .01 level of significance, 2.28 at the .05 level of significance, and 1.89 at the .10 level of significance. For this research, the analysis and discussion is limited to the .05 level of significance--if the F value equals or exceeds 2.28, there is a significant difference in the in-service need indicators for the six service areas and the F value is so indicated by a (*).

The degrees of freedom for the variance test (DF) are listed with the numerator first followed by a slash (/) then the denominator. The constant numerator of 5 indicates there are six service areas (number of columns, ie. service areas, minus one) with the fluctuating denominator being calculated by subtracting the value of the numerator (5 in all cases for this research) from the number of respondents. The number of respondents can be ascertained by adding 5 to the denominator of the degrees of freedom value.

Two columns of information are listed for each individual performance element. The weighted performance element mean (WPEM) is an indication of the importance responding occupational teachers attach to each performance element. The importance classification (IMP) values were calculated as follows: A "C" (Common Importance) means all six service areas gave the performance element a mean importance rating of 2.25 or above; an "M" (Mixed Importance) indicates from one to five service areas gave the performance element a mean importance rating of 2.25 or above; an "NI" (Not

Important) indicates all six service areas gave the performance element a mean importance rating below 2.25. For additional information, review Appendix G which contains a complete listing of the importance and performance means at cluster and performance element level segregated via service areas.

The following definitions and abbreviations are explicated to assist the reader in understanding the tables that follow.

Service Area Abbreviations

Ag - Agriculture
B - Business
DE - Distributive Education
He - Health
HEc - Home Economics
T&I - Trade and Industrial

Column Heading Abbreviations

WPEM - Weighted Performance Element Mean, calculated by adding all useable importance responses and dividing by the number of respondents providing useable data.

W.Mean - Weighted Mean

F Val - Variance value, calculated by the one-way analysis of variance. Significant at the .05 level if the number listed is equal to or exceeds 2.28.

DF - Degrees of Freedom. The first number is the numerator and represents the columns or service area minus one. This number is followed by a slash (/) and the denominator.

The denominator fluctuates in value from performance element to performance element and indicates the number of respondents for the item when added to the numerator value.

Importance Classification

C - (Common) All six service areas gave the performance element a weighted performance element mean rating of 2.25 or above.

M - (Mixed) At least one but less than six service areas gave the performance element a weighted performance element mean of 2.25 or above.

NI - (Not Important) All six service areas gave the performance element a weighted performance element mean below 2.25.

Weighted Mean Response Values

6.23 - Upper Quartile Median Inservice Indicator Response Value

5.74 - Mean Inservice Indicator Response Value

5.72 - Median Inservice Indicator Response Value

5.31 - Lower Quartile Median Inservice Indicator Response Value

Executing (Implementing) Instruction (Category A)

Occupational teachers indicate they have little need for inservice education in learning to utilize traditional educational technology. The weighted mean inservice need indicator of 5.06 falls in the middle of the lower quartile. Only three of the eight performance elements have common importance to occupational teachers with use of the opaque projector regarded as not important by all service areas. The low variance value indicates all six service areas have approximately the same inservice need for this cluster. See Table XXII for a summarization of the data.

TABLE XXII. UTILIZING TRADITIONAL EDUCATIONAL TECHNOLOGY

Category A. Executing (Implementing) Instruction (Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-1. Utilizing Traditional Educational Technology...... (Performance Elements)	NA	NA	4.97	5.10	5.08	5.22	5.21	4.89	5.06	0.57	5/171
(21) Present information with filmstrips................	2.54	C									
(22) Present information with slides....................	2.45	M									
(23) Present information with sound motion pictures.....	2.97	C									
(24) Present information with the overhead projector....	2.83	C									
(25) Present information with the opaque projector.....	2.03	NI									
(26) Present information with the audio tape recorder...	2.15	M									
(27) Present information with single concept films......	2.34	M									
(28) Present information with a record player...........	1.80	M									

Utilizing innovative educational technology was rated as the cluster having the least need for inservice education of the 57 clusters tested. Most service areas rated it at the below average importance level with an above average performance rating. None of the performance elements had common importance with presenting information by a telephone amplifier regarded as not important by all service areas. See Table XXIII for a summarization of this data.

TABLE XXIII UTILIZING INNOVATIVE EDUCATIONAL TECHNOLOGY

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-2. Utilizing Innovative Educational Technology......... (Performance Elements)	NA	NA	3.64	4.35	4.61	3.83	3.63	4.36	4.05	2.22	5/158
(29) Present information with educational television....	2.23	M									
(30) Present info with a video recorder/closed circuit TV..	2.47	M									
(31) Present info with a tele-speaker (telephone amplifier)..	1.76	NI									
(32) Direct teaching machine programmed instruction.....	2.11	M									

The utilizing visual aids cluster approaches the upper quartile in inservice need. Four of the six performance elements have common importance with use of the flannel board rated as mixed but low importance. See Table XXIV for a summarization of the data.

TABLE XXIV. UTILIZING VISUAL AIDS

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-3. Utilizing Visual Aids	NA	NA	5.87	5.93	6.23	6.11	6.11	6.16	6.06	0.63	5/171
(Performance Elements)											
(33) Present information with bulletin boards	2.84	C									
(34) Present information with exhibits	2.94	C									
(35) Present information with the aid of a flannel board	1.95	M									
(36) Present information with the aid of a flip chart	2.53	M									
(37) Present information with the aid of a chalk board	3.35	C									
(38) Illustrate with models and real objects	3.71	C									

Occupational teachers have little need for inservice education on employing group interaction techniques. The weighted mean for this cluster falls in the upper part of the lower quartile. There is significant disagreement between the service areas regarding the need for inservice education on this cluster. Home economics and distributive education teachers feel they need additional education while agriculture teachers rate their need for additional education as quite low. See Table XXV for a summarization of the data.

Occupational teachers feel they need additional education in employing teacher-centered methods of presentation. The inservice need indicator of 6.47 is in the upper quartile

TABLE XXV. EMPLOYING GROUP INTERACTION TECHNIQUES

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-4. Employing Group Interaction Techniques.............	NA	NA	4.82	5.18	5.96	5.43	5.97	5.02	5.28	2.70*	5/168
(Performance Elements)											
(39) Conduct buzz groups..................................	2.53	M									
(40) Conduct symposiums...................................	2.03	M									
(41) Conduct panel discussions............................	2.45	M									
(42) Employ question box techniques.......................	2.08	M									
(43) Conduct brainstorming sessions.......................	2.58	C									
(44) Lead group discussions...............................	3.09	C									
(45) Employ role playing techniques.......................	2.81	C									

of inservice need. All eight performance elements have common importance across service areas. See Table XXVI for a summarization of these data.

TABLE XXVI. EMPLOYING TEACHER-CENTERED METHODS OF PRESENTATION

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-5. Employing Teacher-Centered Methods of Presentation..	NA	NA	6.46	6.44	5.91	6.62	6.44	6.49	6.47	1.13	5/171
(Performance Elements)											
(46) Demonstrate a manipulative skill....................	3.66	C									
(47) Present a concept or principle through a demonstration..................................	3.69	C									
(48) Give a lecture.......................................	2.69	C									
(49) Give an illustrated talk.............................	3.23	C									
(50) Present information with analogies..................	2.94	C									
(51) Present information through individualized instruction....................................	3.44	C									
(52) Present information through team teaching..........	2.88	C									
(53) Give an assignment...................................	2.83	C									

Occupational teachers regard the 13 performance element comprising the basic instructional strategy cluster as important. The weighted mean inservice need indicator value of 6.30 is in the upper quartile but there is a rather high, though insignificant, level of variance between service areas. See Table XXVII for a summarization of the data.

TABLE XXVII. APPLYING BASIC INSTRUCTIONAL STRATEGIES

			INSERVICE NEED INDICATOR								
(Cluster)	MPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-6. Applying Basic Instructional Strategies	NA	NA	6.04	6.72	6.16	6.18	6.58	6.23	6.30	1.57	5/167
(Performance Elements)											
(54) Conduct group supervised study	2.63	C									
(55) Present information through case-study problems	2.92	C									
(56) Introduce a lesson	3.12	C									
(57) Obtain summary for a lesson	3.00	C									
(58) Employ oral questioning techniques	3.36	C									
(59) Acknowledge student verbal and non-verbal cues	3.29	C									
(60) Enrich instruction to challenge more able students	3.38	C									
(61) Reinforce learning	3.47	C									
(62) Provide remedial work for slower students	3.20	C									
(63) Employ reward techniques	2.93	C									
(64) Establish frames of reference to enable students to understand a situation from several points of view.	3.36	C									
(65) Apply non-verbal techniques (gestures, silence, etc.)	3.00	C									
(66) Direct students in applying problem solving techniques	3.39	C									

There is significant disagreement between service areas as to the need for additional education on the utilization of community resources. Distributive education and home economics teachers regard the cluster as being much more important than the other service areas with trade and industrial teachers attaching much lower importance and inservice need than their peers in other service areas. All performance elements were regarded as important by all service areas. See Table XXVIII for a summarization of these data.

Occupational teachers agree that they have an average need for additional education in directing instruction by students. See Table XXIX for a summarization of the data.

Occupational teachers felt that directing laboratory instruction was very important and that their performance level was low. The weighted mean inservice need indicator

TABLE XXVII. UTILIZING COMMUNITY RESOURCES

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-7. Utilizing Community Resources........................	NA	NA	5.86	5.63	6.27	5.88	6.41	5.14	5.72	3.71*	5/167
(Performance Elements)											
(67) Present information with the assistance of a resource person....................................	2.94	C									
(68) Direct students in gathering info from the community..	2.82	C									
(69) Conduct field trips..................................	3.14	C									

TABLE XXIX. DIRECTING INSTRUCTION BY STUDENTS

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-8. Directing Instruction by Students....................	NA	NA	5.67	6.13	5.65	5.50	5.81	5.57	5.70	0.77	5/165
(Performance Elements)											
(70) Direct students in instructing other students......	3.08	C									
(71) Direct student presentations........................	2.82	C									

of 6.48 indicates this is the category A cluster for which occupational teachers most need additional education. The four performance elements comprising this cluster were rated above average in importance. See Table XXX for a summarization of this data.

Occupational teachers disagree as to their need for additional education regarding the direction of independent study. Distributive education teachers regard this cluster as having below average importance while business teachers find it above average in importance. As would be expected, business teachers feel they have an above average need for

TABLE XXX. DIRECTING LABORATORY INSTRUCTION

(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
			INSERVICE NEED INDICATOR								
A-9. Directing Laboratory Instruction......................	NA	NA	6.45	6.82	6.58	6.50	6.31	6.34	6.48	0.83	5/167
(Performance Elements)											
(72) Direct student laboratory experience................	3.47	C									
(73) Direct students in preparing lab work or job plans..	3.31	C									
(74) Guide student progress through the use of job plans.	3.23	C									
(75) Present information by the project method...........	3.20	C									

inservice education while distributive education teachers have little felt need for inservice education. Agriculture teachers felt directing programmed instruction was not important. See Table XXXI for a summarization of data on this cluster.

TABLE XXXI. DIRECTING INDEPENDENT STUDY

(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
			INSERVICE NEED INDICATOR								
A-10. Directing Independent Study..........................	NA	NA	5.37	6.09	4.96	5.58	5.07	5.33	5.46	2.37*	5/164
(Performance Elements)											
(76) Direct student body of information/assignment sheets	2.97	C									
(77) Direct student study of textbooks, bulletins, etc...	2.97	C									
(78) Direct written programmed instruction...............	2.51	M									

Occupational teachers do not feel a great need for inservice education on the execution or implementation of instruction. The category had a weighted inservice need indicator of 5.66 as compared to an all category mean indicator of 5.74. Of the ten categories tested, this category ranked 7th in overall weighted inservice need.

There was significant disagreement between service areas regarding the level of inservice need on three of the ten clusters. Three of the ten clusters fall in the upper quartile of inservice need indicators with three clusters also falling in the lower quartile of inservice need indicators. Overall, the inservice need in this category would be slightly below average as compared to the other nine categories.

Management (Category B)

Projecting instructional resource needs ranked 6th among the 57 clusters on the overall inservice need indicator scale. All performance elements were given an above average importance rating. The F value of 2.13 indicates a great deal of variation, though it is statistically insignificant, in inservice need between service area groups. See Table XXXII for a summarization of the data.

TABLE XXXII. PROJECTING INSTRUCTIONAL RESOURCE NEEDS

			INSERVICE NEED INDICATOR								
Category B. Management (Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-1. Projecting Instructional Resource Needs.............	NA	NA	5.99	6.83	6.43	6.39	6.73	6.71	6.53	2.13	5/170
(Performance Elements)											
(79) Compile a list of supplies needed for the academic year...	3.44	C									
(80) Identify new tools and/or equipment needed..........	3.47	C									
(81) Recommend library acquisitions (books, periodicals).	3.27	C									

Occupational teachers varied significantly in their need for inservice education on budget preparation. The occupational teacher inservice need indicator value of 5.70 is about average among the 57 clusters. Two of the three performance elements were ranked above average in importance with the performance element dealing with estimating travel expenses ranging from a service area importance level of below average to above average. See Table XXXIII for a summarization of these data.

TABLE XXXIII. PREPARING AN ANNUAL BUDGET

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-2. Preparing an Annual Budget	NA	NA	6.13	5.72	6.27	4.82	5.83	5.96	5.70	3.55*	5/167
(Performance Elements)											
(82) Prepare a capital outlay budget proposal for equipment	3.09	C									
(83) Plan an operating budget proposal for consumable supplies, services, and instructional materials	3.12	C									
(84) Prepare a budget for estimating travel expenses	2.63	M									

There was also great variation in the level of inservice need indicated by service area groups regarding the procurement of supplies and equipment. Distributive education teachers have great need for inservice education on this subject while health teachers have practically no need for inservice education. See Table XXXIV for a summarization of these data.

Maintaining records and files was regarded as above average in importance by occupational teachers in all service areas. There was agreement on the level of inservice need, this level approaching the upper quartile. See Table XXXV for a summarization of these data.

Assuring laboratory safety ranked 4th of the 57 clusters regarding occupational teachers need for inservice education.

TABLE XXXIV. PROCURING SUPPLIES AND FACILITIES

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-3. Procuring Supplies and Facilities	NA	NA	5.96	5.82	6.52	4.91	5.47	6.01	5.70	4.88*	5/169
(Performance Elements)											
(85) Accept gifts or donations of supplies and equipment in accordance with school policy	2.95	C									
(86) Prepare purchase requests for approved equipment	3.31	C									
(87) Arrange for additional occupational facilities to accommodate expanded enrollment/technological advances	2.82	C									
(88) Design a procedure for acquiring needed supplies, etc	2.89	C									
(89) Devise a system for determining and collecting student fees for consumable supplies	2.43	C									

TABLE XXXV. MAINTAINING RECORDS AND FILES

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-4. Maintaining Records and Files	NA	NA	5.88	6.17	5.78	6.09	6.32	6.16	6.10	0.52	5/170
(Performance Elements)											
(90) Structure a filing system for records and report forms	3.16	C									
(91) Supply the data for occupational reports required by the state department of education	2.84	C									
(92) Devise a filing system for instructional materials	3.32	C									
(93) Devise a system for maintaining occupational opportunity information for use by occupational students	3.12	C									
(94) Assemble student files documenting personal characteristics, attitudes, and grades	3.16	C									

All performance elements were regarded above average in importance by all service area groups. Agriculture, trade and industrial, and health teachers have great need for inservice education with distributive education and home economics having significantly less need. See Table XXXVI for a summarization of the data.

Occupational teachers have a greater need for inservice education on establishing acceptable student behavior than on

TABLE XXXVI. ASSURING LABORATORY SAFETY

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-5. Assuring Laboratory Safety	NA	NA	7.02	6.40	6.00	6.73	6.17	6.97	6.68	2.40*	5/166
(Performance Elements)											
(95) Provide approved safety apparel and devices for occupational students assigned to hazardous equipment	3.40	C									
(96) Establish a procedure for attending to the first aid needs of students	3.46	C									
(97) Maintain a record of safety instruction presented in compliance with safety laws	3.29	C									

any other cluster. All performance elements were rated well above average in importance. There was agreement across service area groups that inservice programs dealing with establishing acceptable student behavior were greatly needed. All service area groups rated their performance on this cluster as well below average. See Table XXXVII for a summarization of the data.

TABLE XXXVII. ESTABLISHING ACCEPTABLE STUDENT BEHAVIOR

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-6. Establishing Acceptable Student Behavior	NA	NA	7.04	7.25	6.47	6.95	7.07	7.02	7.02	1.23	5/170
(Performance Elements)											
(98) Uphold school standards of expected student behavior	3.46	C									
(99) Formulate with students acceptable standards of behavior in occupational classrooms and laboratories	3.47	C									
(100) Uphold acceptable standards of student behavior in occupational classrooms and laboratories	3.64	C									
(101) Carry out approved disciplinary action when warrented	3.52	C									
(102) Encourage students to exercise self discipline	3.72	C									
(103) Control outbursts of fighting and aggressive behavior	3.55	C									

Managing the laboratory was rated in the upper quartile of inservice need indicators. All performance elements were rated as being important by all service area groups. See Table XXXVIII for a summarization of these data.

TABLE XXXVIII. MANAGING THE LABORATORY

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-7. Managing the Laboratory	NA	NA	6.75	6.64	6.01	6.19	6.74	6.56	6.52	1.85	5/167
(Performance Elements)											
(104) Maintain an inventory of occupational tools, supplies, and equipment	3.41	C									
(105) Establish a system for repairing and servicing tools and equipment in the laboratory	3.17	C									
(106) Arrange for the storage and security of supplies and equipment	3.41	C									
(107) Implement student check-out procedures for tools, supplies, and equipment used in the laboratory	3.10	C									
(108) Direct students in a system for cleaning and maintaining the laboratory	3.43	C									
(109) Schedule laboratory equipment for maximum utilization by students	3.41	C									
(110) Arrange layout of the occupational laboratory to simulate the occupational environment	3.57	C									
(111) Arrange laboratory work areas and storage space to facilitate student performance	3.49	C									
(112) Control heat, light, and ventilation in occupational laboratories and classrooms	3.25	C									
(113) Establish a policy for use of the physical facilities and equipment by non-school personnel	2.82	C									

Occupational teachers feel an important need for inservice education regarding student, classroom, and laboratory management. The category had a weighted inservice need indicator of 6.32 as compared to an all category mean indicator of 5.74. Of the ten categories tested, this category ranked first in overall weighted inservice need. Cluster B-6, dealing with the establishment of acceptable student behavior, had the highest inservice need indicator of the 57 clusters tested.

There was significant disagreement between service area teacher groups regarding the level of inservice need on three of the seven clusters. Four of the seven management clusters fall in the upper quartile of inservice need indicators with no clusters falling in the lower quartile. Overall, occupational teachers indicate they have a greater inservice need in the management category than in any of the other nine categories that were tested.

School-Community Relations (Category C)

Occupational teachers in all six service areas regard all performance elements in the planning school-community relations activities cluster as important. Trade and industrial teachers, while regarding all three performance elements as important, rate the importance of performance elements 115 and 116 significantly lower than the other service area teacher groups. This lower importance rating, when added to an above average performance rating, gives an inservice need indicator value for trade and industrial teachers that is significantly lower than the need indicator of the other five service area teacher groups. See Table XXXIX for a summarization of the data.

TABLE XXXIX. PLANNING SCHOOL-COMMUNITY RELATIONS ACTIVITIES

Category C. School-Community Relations (Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-1. Planning School-Community Relations Activities......	NA	NA	5.38	5.56	5.83	5.27	5.92	4.80	5.31	2.32*	5/168
(Performance Elements)											
(114) Assist in the development of policies regarding school-community relations........................	2.78	C									
(115) Plan school-community relations activities for the occupational education program................	2.95	C									
(116) Procure school administration clearance to conduct school-community relations activities............	2.97	C									

The inservice need indicator for publicizing occupational education and the school's occupational program falls slightly above the lower quartile. All performance elements are rated important by all service area groups with the exception of agriculture teachers feeling that presenting activities of the occupational program on radio is not important. See Table XL for a summarization of these data.

TABLE XL. PUBLICIZING OCCUPATIONAL EDUCATION AND THE SCHOOL'S OCCUPATIONAL PROGRAM

			INSERVICE NEED INDICATOR								
	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W. Mean	F Val	DF
(Cluster)											
C-2. Publicizing Occupational Education and the School's Occupational Program	NA	NA	5.16	5.50	6.40	5.00	5.31	5.50	5.37	1.99	5/167
(Performance Elements)											
(117) Provide brochures to inform the school and community of the occupational program	3.02	C									
(118) Provide displays in the school and community on the occupational education program	3.09	C									
(119) Prepare news releases and manuscripts on activities of the occupational program	2.92	C									
(120) Speak to school and community groups on the occupational program	3.07	C									
(121) Present activities of the occupational program on radio	2.46	M									
(122) Present activities of the occupational program on television	2.52	C									
(123) Direct student presentations describing activities of the occupational program	3.02	C									

Occupational teachers agree on the level of inservice need regarding the maintenance of good school-community relations. The weighted mean inservice need indicator of 5.77 is slightly above the median inservice need indicator. All performance elements are considered important though the level of importance varies greatly. See Table XLI for a summarization of the data.

Obtaining school-community feedback on the occupational program was considered important by all service area groups.

TABLE XLI. MAINTAINING GOOD SCHOOL-COMMUNITY RELATIONS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-3. Maintaining Good School-Community Relations..........	NA	NA	5.68	6.02	6.31	5.48	5.98	5.72	5.77	1.08	5/169
(Performance Elements)											
(124) Conduct an open house to familiarize members of the school and community with activities of the program..	3.55	C									
(125) Sponsor student-parent activities for the occupational education program....................	2.90	C									
(126) Assist with special community social events........	2.53	C									
(127) Assist with community business and industry sponsored activities..............................	2.87	C									
(128) Serve in professional non-occupational organizations to improve the image of the occupational program..	2.88	C									
(129) Serve in community civic, service, or social organizations to improve the image of the occ. program..	2.85	C									
(130) Provide consultant services to local business/industry..	2.70	C									
(131) Maintain liaison with union officials and employers	2.88	C									
(132) Maintain liaison with employment agencies..........	2.94	C									
(133) Maintain liaison with community professional, service, fraternal, social, and religious organizations....................................	2.89	C									
(134) Maintain good relations with other schools.........	3.37	C									

The weighted mean inservice need indicator of 5.46 falls slightly above the lower quartile. See Table XLII for a summarization of these data.

TABLE XLII. OBTAINING SCHOOL-COMMUNITY FEEDBACK ON THE OCCUPATIONAL PROGRAM

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-4. Obtaining School-Community Feedback on the Occupational Program................................	NA	NA	5.86	5.79	4.95	5.18	5.51	5.32	5.46	1.78	5/168
(Performance Elements)											
(135) Obtain informal feedback through contacts with individuals in the school and community...........	3.13	C									
(136) Conduct opinion surveys in the school and community concerning the occupational program...............	2.63	C									
(137) Analyze enrollment trends to determine student and parent acceptance of the occupational program.....	2.93	C									
(138) Obtain information from parents concerning their expectations of the occupational program..........	2.88	C									
(139) Consult the advisory committee to obtain information concerning their expectations of the program.	3.22	C									
(140) Study community voting results on financial issues affecting the occupational program................	2.75	C									
(141) Acquire information from members of the community power structure regarding their program expectations....................................	2.70	C									

Occupational teachers in all six service area groups feel they have an important need for inservice education on the maintenance of good intra-school relationships. All four performance elements are considered well above average in importance. All occupational teacher service area groups rate this cluster as above average in importance and their performance as below average. The weighted mean inservice need indicator of 6.75 ranks 3rd of the 57 clusters tested. See Table XLIII for a summarization of these data.

TABLE XLIII. MAINTAINING GOOD INTRA-SCHOOL RELATIONSHIPS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-5. Maintaining Good Intra-School Relationships.........	NA	NA	6.51	6.77	6.35	6.90	7.14	6.68	6.75	1.26	5/165
(Performance Elements)											
(142) Express a philosophy consistent with that of the occupational staff..............................	3.22	C									
(143) Maintain good working relationships with the school administration and faculty................	3.67	C									
(144) Assist in planning the goals of the total school program..	3.34	C									
(145) Maintain good working relationships with the school supporting staff.........................	3.59	C									

Occupational teachers do not feel a great need for inservice education on school-community relations with the exception of the maintaining good intra-school relationships cluster. This cluster is the third highest in inservice need of the 57 clusters tested. The category had a weighted inservice need indicator of 5.73 as compared to the all category mean indicator of 5.74. The 5.73 weighted inservice need indicator ranks 6th of the 10 categories tested.

There was significant disagreement between service areas regarding level of inservice need on only one of the five clusters. One of the five clusters falls in the upper quartile and one falls in the lower quartile. Overall, inservice need in this category is below average as compared to other categories. An important exception to the overall below average rating is the maintaining good intra-school relationships clusters which was given a high inservice need indicator rating.

Planning Instruction (Category D)

The structuring or designing a course cluster falls in the lower part of the upper quartile in inservice need. Occupational teachers across service area groups agree on this level of inservice need. All performance elements are rated as important by all service area groups with the exception of business teachers who feel that involving students in planning a unit is not important. See Table XLIV for a summarization of these data.

TABLE XLIV. STRUCTURING/DESIGNING A COURSE

			INSERVICE NEED INDICATOR								
Category D. Planning Instruction (Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
D-1. Structuring/Designing a Course	NA	NA	6.00	6.04	6.23	6.41	6.42	6.28	6.23	1.34	5/186
(Performance Elements)											
(146) Review general program objectives	3.23	C									
(147) Review student performance objectives	3.33	C									
(148) Sequence student performance objectives for a course	3.04	C									
(149) Involve students in planning a unit	2.49	M									
(150) Determine student needs and interest	3.38	C									
(151) Select student performance objectives for a unit	3.09	C									
(152) Write content outline for a unit	3.04	C									
(153) Correlate unit content with on-the-job and/or laboratory experiences	3.61	C									
(154) Determine group and individual learning experiences based on individual differences of students	3.14	C									
(155) Select methods of evaluating students' performance throughout a unit	3.28	C									

Occupational teachers in the six service areas significantly disagree as to their need for inservice education on planning lessons. All service area teacher groups rate all performance elements as important. Agriculture teachers have only an average need for inservice education on this cluster but home economics and health teachers have an inservice need that falls near the top of the upper quartile. See Table XLV for a summarization of these data.

TABLE XLV. PLANNING A LESSON

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
D-2. Planning a Lesson	NA	NA	5.36	6.09	6.10	6.64	6.68	6.03	6.15	7.00*	5/187
(Performance Elements)											
(156) Identify student performance objectives	3.16	C									
(157) Select teaching techniques	3.22	C									
(158) Plan the introduction of a lesson	3.07	C									
(159) Plan the content of a lesson	3.37	C									
(160) Plan the summary of a lesson	3.12	C									
(161) Plan student learning experiences	3.47	C									
(162) Select methods of evaluating student's attainment of specific performance objectives	3.28	C									
(163) Write a lesson plan	2.77	C									

The selection of instuctional resources was regarded as an above average importance cluster by all service area teacher groups. The weighted mean inservice need indicator of 6.51 falls in the upper quartile of inservice need indicators. Occupational teachers have greater inservice need for this cluster than any other cluster in Category D. See Table XLVI for a summarization of the data.

Occupational teachers indicate their inservice need to be below the median level regarding the development of instructional materials. There is a large though statistically

TABLE XLVI. SELECTING INSTRUCTIONAL RESOURCES

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
D-3. Selecting Instructional Resources	NA	NA	6.21	6.45	6.59	6.31	7.02	6.51	6.52	1.60	5/185
(Performance Elements)											
(164) Obtain textbooks, reference, and other instructional materials	3.35	C									
(165) Select tools and equipment for a lesson	3.52	C									
(166) Assemble consumable supplies for instructional purposes	3.40	C									

insignificant variance in the level of need between service area teacher groups. All performance elements are regarded as important with the exception of the preparation of materials with a stencil duplicator which is regarded as not important by agriculture and trade and industrial teachers. See Table XLVII for a summarization of these data.

TABLE XLVII. DEVELOPING INSTRUCTIONAL MATERIALS

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
D-4. Developing Instructional Materials	NA	NA	5.06	5.78	5.91	5.71	5.88	5.47	5.56	2.15	5/183
(Performance Elements)											
(167) Develop instructional materials (example - charts, transparencies, assignment sheets, etc.)	3.16	C									
(168) Prepare instructional materials with a spirit duplicator	2.77	C									
(169) Prepare instructional materials with a stencil duplicator	2.30	M									
(170) Prepare instructional materials with a photocopier	2.51	C									
(171) Involve students in the preparation of instructional materials	2.57	C									

Occupational teachers feel an important need for inservice education regarding instructional planning. The category had a weighted inservice need indicator of 6.11 as compared to an all category mean indicator of 5.74. Of the ten categories tested, this category ranked second in overall weighted inservice need.

There was significant disagreement between service area occupational teacher groups regarding the level of inservice need on one of the four clusters. Two of the four clusters fall in the upper quartile of inservice need indicators with none of the clusters close to falling in the lower quartile. Overall, inservice need for occupational teachers in this category ranks second among the ten categories tested.

Guidance (Category E)

Obtaining background information on students received mixed importance ratings on four of the six performance elements. The weighted mean inservice need indicator of 4.87 falls near the bottom of the lower quartile. See Table XLVIII for a summarization of these data.

TABLE XLVIII. OBTAINING BACKGROUND INFORMATION ON STUDENTS

Category E. Guidance (Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-1. Obtaining Background Information on Students........	NA	NA	4.84	4.67	5.00	5.27	5.34	4.54	4.87	1.89	5/186
(Performance Elements)											
(172) Determine students' background and environment....	2.76	C									
(173) Analyze students' cumulative records..............	2.36	M									
(174) Maintain anecdotal records on students............	2.65	C									
(175) Determine relationships among students through sociometric techniques (eg. sociogram)...........	1.96	M									
(176) Review students' autobiographies for information to aid in understanding the students.............	2.54	M									
(177) Assemble information for case study reports.......	2.06	M									

Occupational teachers feel they need inservice programs concerning the promotion of constructive teacher-student relationships. There is disagreement regarding the importance attached to individual performance elements. Agriculture and home economics teachers feel conducting home visits is important while trade and industrial, health, and business teachers find this performance element not important. See Table XLIX for a summarization of the data.

TABLE XLIX. PROMOTING CONSTRUCTIVE TEACHER-STUDENT RELATIONSHIPS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-2. Promoting Constructive Teacher-Student Relationships.	NA	NA	6.30	6.00	6.38	6.08	6.71	6.01	6.17	1.92	5/185
(Performance Elements)											
(178) Communicate with prospective and continuing students during the summer	2.46	M									
(179) Maintain an open door policy for student consultation	3.58	C									
(180) Encourage students to discuss career aspirations	3.64	C									
(181) Demonstrate personal concern for the student and his family	3.28	C									
(182) Conduct home visits	1.87	M									

With the exception of group counseling sessions, occupational teachers in the six service area groups feel all performance elements have common importance. The weighted mean inservice need indicator of 5.82 is slightly above the median value of 5.72. There is significant difference in the views of the six occupational teacher groups with home economics teachers having a significantly greater need for inservice counseling programs than the other service area groups. See Table L for a summarization of these data.

Occupational teachers feel it is quite important that they involve guidance counselors in assisting students. All four performance elements comprising this cluster were rated

TABLE L. COUNSELING STUDENTS

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-3. Counseling Students	NA	NA	5.64	5.50	5.90	6.09	6.40	5.73	5.82	2.69*	5/183
(Performance Elements)											
(183) Recognize potential problems of students	3.35	C									
(184) Conduct a conference for counseling a student	2.85	C									
(185) Conduct group counseling sessions	2.27	M									
(186) Confer with the student and his parents regarding his educational development	2.80	C									
(187) Interpret occupational tests and inventories to students	2.63	C									
(188) Assist students in developing good study habits	3.16	C									

as having common importance. The overall weighted mean inservice need indicator value of 5.92 is slightly above the median value. There is a rather large though statistically insignificant variance in teacher inservice need. Home economics, health, and distributive education teachers have a greater need for inservice programs than agriculture or trade and industrial teachers. See Table LI for a summarization of the data.

TABLE LI. INVOLVING GUIDANCE COUNSELORS IN ASSISTING STUDENTS

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-4. Involving Guidance Counselors in Assisting Students	NA	NA	5.63	5.93	6.28	6.25	6.49	5.62	5.92	2.17	5/181
(Performance Elements)											
(189) Establish communication patterns for exchanging information with the guidance staff	3.25	C									
(190) Supply guidance staff with performance data about students	3.21	C									
(191) Refer students to guidance staff and other specialist	3.16	C									
(192) Arrange for guidance counselors to administer and interpret personality, aptitude, intelligence tests for specific students	2.70	C									

Occupational teachers vary significantly in their need for inservice programs concerned with involving other persons and agencies in assisting students. Home economics teachers have a much more important need for inservice programs in this area than distributive education and trade and industrial teachers. Two of the four performance elements were rated as commonly important with performance element 196 regarded as not important by agriculture, health, and trade and industrial teachers. See Table LII for a summarization of these data.

TABLE LII. INVOLVING OTHER PERSONS AND AGENCIES IN ASSISTING STUDENTS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-5. Involving Other Persons/Agencies in Assisting Students	NA	NA	5.12	5.48	4.98	5.14	5.92	4.88	5.19	2.43*	5/183
(Performance Elements)											
(193) Assist students with their problems by working cooperatively with outside agencies (ex. health, welfare)	2.52	M									
(194) Work with other teachers to help students with individual concerns	2.92	C									
(195) Refer students to qualified resource persons for occupational and educational information	3.33	C									
(196) Arrange for the local office of the U.S. Employment Service to administer and interpret the GAT Battery	2.17	M									

Assisting students in planning post-secondary education and/or securing employment was regarded as very important by occupational teachers in all service area groups. All groups agree on the weighted mean inservice need indicator of 6.62 which is the 5th highest of the 57 cluster inservice need indicators. Occupational teachers need inservice programs for this cluster much more than they need education on the other clusters making up the guidance category. See Table LIII for a summarization of the data.

TABLE LIII. ASSISTING STUDENTS IN PLANNING POST-SECONDARY EDUCATION AND/OR SECURING EMPLOYMENT

			INSERVICE NEED INDICATOR								
(Cluster)	MPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	NA	NA	6.32	6.80	6.60	6.71	6.80	6.58	6.62	0.75	5/182
(Performance Elements)											
(197) Present information to students on occupational opportunities	3.59	C									
(198) Present information to students on advanced training and educational opportunities available to them	3.56	C									
(199) Assist students in determining ways to best describe their saleable skills	3.38	C									
(200) Assist graduating students in preparing for interviews with potential employers	3.47	C									
(201) Assist students in securing and completing applications for jobs, scholarships, college admissions, etc.	3.16	C									
(202) Write letters of recommendation for students	3.41	C									

Occupational teachers have a need for inservice education on guidance. The category had a weighted mean inservice need indicator of 5.77 as compared to an overall category mean indicator of 5.74. Of the ten categories tested, this category ranked 4th in overall weighted inservice need.

There was significant disagreement between service area teacher groups regarding the level of inservice need on two of the six clusters. Only one of the six clusters is in the upper quartile but four of the six are above the median in inservice need indicator value. Two of the six clusters are in the lower quartile of inservice need indicators. Overall, the inservice need in this category would be above average as compared to the other nine categories.

Student Occupational Organizations (Category F)

Occupational teachers in all six service area groups rate as important three of the five performance elements comprising the establishment of a student occupational organization cluster with two of the elements receiving a mixed importance rating. There is much though statistically insignificant variance in the weighted mean inservice need indicator between service area groups of occupational teachers. The inservice need indicator values range from a 3.75 for home economics teachers to a high of 5.64 for distributive education teachers. See Table LIV for a summarization of these data.

TABLE LIV. ESTABLISHING A STUDENT OCCUPATIONAL ORGANIZATION

			INSERVICE NEED INDICATOR								
Category F. Student Occupational Organization (Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
F-1. Establishing a Student Occupational Organization....	NA	NA	4.66	4.50	5.64	4.41	3.75	4.32	4.45	2.19	5/173
(Performance Elements)											
(203) Obtain school administration approval for establishing a student occupational organization......	2.60	C									
(204) Contact state department personnel regarding the steps to follow in organizing a student organization....................................	2.41	M									
(205) Acquaint prospective members and their parents with the purposes, activities, and values of the org...	2.53	C									
(206) Organize a student committee to assess student interest in joining a student occupational org....	2.43	C									
(207) Assist in developing a constitution and bylaws for the student occupational organization............	2.39	M									

There is significant difference in the inservice need of occupational teachers between service area groups for the advising a student occupational organization cluster. The need ranges from a low indicator value of 3.62 for home economics to a high of 5.41 for distributive education. Only

3 of the 17 performance elements received a common importance rating. Though all service area teacher groups gave the cluster a relatively low importance rating, trade and industrial teachers found it particularly unimportant. Their weighted overall importance value of 2.18 would be classified not important on the importance scale. Trade and industrial teachers found 13 of the 17 performance elements not important. The clusters overall weighted mean importance level indicator of 4.31 ranks 56th of the 57 clusters tested. See Table LV for a summarization of the data.

TABLE LV. ADVISING A STUDENT OCCUPATIONAL ORGANIZATION

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
F-2. Advising a Student Occupational Organization........	NA	NA	4.65	4.48	5.41	4.14	3.62	4.12	4.31	2.39*	5/170
(Performance Elements)											
(208) Conduct an organizational meeting..................	2.49	C									
(209) Direct initiation/installation activities of the student occupational organization................	2.24	M									
(210) Orient students to the student occupational org....	2.57	C									
(211) Assist in the election and installation of officers	2.26	M									
(212) Conduct leadership training sessions for officers..	2.36	M									
(213) Obtain assistance of state department personnel in maintaining the student occupational organization.	2.30	M									
(214) Assist students in developing a yearly program of work..	2.53	M									
(215) Assist students in advancing within the student occupational organization (degrees, rank, etc.)...	2.35	M									
(216) Supervise social and educational activities........	2.43	M									
(217) Involve elected chapter parents in org. activities.	2.25	M									
(218) Assist students with publicizing student occupational organization activities....................	2.44	M									
(219) Assist students with financial management of the student occupational organization................	2.35	M									
(220) Assist students in planning and organizing fund-raising activities for the student occupational org...	2.44	C									
(221) Maintain a file of publications available for the student occupational organization................	2.41	M									
(222) Supervise the development of an annual handbook and/or scrapbook for the student occupational org.	2.18	M									
(223) Maintain the student occupational organization program as an integral part of instruction........	2.32	M									
(224) Evaluate the student occupational organization.....	2.30	M									

Occupational teachers gave the participating in state and national student occupational organization activities cluster a weighted overall inservice need indicator of 4.42, placing this cluster 55th on the list of inservice needs of 57 clusters tested. Four of the seven performance elements were of common importance though most rated relatively low in importance. There was a large though statistically insignificant variance in the performance level of teachers between the six service area groups. Distributive education teachers felt their performance was particularly low relative to their peer teacher groups. See Table LVI for a summarization of these data.

TABLE LVI. PARTICIPATING IN STATE AND NATIONAL STUDENT OCCUPATIONAL ORGANIZATION ACTIVITY

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
F-3. Participating in State and National Student Occupational Organization Activities...............	NA	NA	4.64	4.38	5.47	4.31	3.96	4.32	4.42	1.22	5/174
(Performance Elements)											
(225) Affiliate the student organization with the state and national organization.........................	2.53	C									
(226) Assist in the preparation of state and national reports for the student occupational organization.	2.32	M									
(227) Provide advice and training for student entries in state and national student occupational contests..	2.60	C									
(228) Send student representatives to district, state, regional, and national student occupational activities.......................................	2.57	C									
(229) Assist in the development of rules and procedures for conducting student occupational org. contests.	2.35	M									
(230) Participate in district, state, regional, and national activities of the student organization...	2.44	C									
(231) Serve as an advisor or judge for district, state, regional, or national contests....................	2.39	M									

Occupational teachers feel practically no need for inservice education on the student occupational organization category. The category had a weighted inservice need indicator of 4.39 as compared to an overall category mean indicator of 5.76. Of the ten categories tested, this category ranked 10th and last in inservice need.

There was significant disagreement between service area teacher groups regarding the level of inservice need on one of the three clusters. All three of the clusters fall in the lower quartile of inservice need indicators. When compared with the other nine categories, the student occupational organization category is last in occupational teacher perceived inservice need.

Professional Role and Development (Category G)

The performance elements comprising the cluster dealing with philosophy and goals of the teaching profession were considered very important by all service area occupational teacher groups. The inservice need indicator of 6.76 was second highest of the 57 clusters tested. Health teachers have a particularly high need for inservice programs in this area. See Table LVII for a summarization of the data.

TABLE LVII. UPHOLDING THE PHILOSOPHY AND GOALS OF THE PROFESSION

			INSERVICE NEED INDICATOR								
Category G. Professional Role and Development (Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
G-1. Upholding the Philosophy and Goals of the Profession.	NA	NA	6.39	6.76	6.65	7.10	6.95	6.72	6.76	1.86	5/177
(Performance Elements)											
(232) Identify current trends of the teaching profession.	3.38	C									
(233) Promote the attainment of the goals of the teaching profession	3.36	C									
(234) Express a personal professional philosophy consistent with the goals of occupational education	3.41	C									
(235) Maintain the ethical standards expected of a professional educator	3.63	C									

All performance elements in the contributing professional service cluster were considered to have common importance with the level of importance ranging from a low of 2.40 up to 3.23. Occupational teachers in the six service areas agree on their inservice need, the need falling slightly above the median level of the 57 clusters tested. See Table LVIII for a summarization of the data.

TABLE LVIII. CONTRIBUTING PROFESSIONAL SERVICE

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
G-2. Contributing Professional Service	NA	NA	5.66	5.68	6.09	5.72	5.94	5.75	5.75	0.27	5/181
(Performance Elements)											
(236) Support professional organizations through membership and attendance at meetings	3.17	C									
(237) Serve professional organizations as an officer and/or chairman or committee member	2.77	C									
(238) Represent the teaching profession as a committee member, delegate, or program participant at meetings and activities of other related professions	2.89	C									
(239) Participate in experimental and other data collecting research activities	2.77	C									
(240) Write an article for publication which contributes to the literature of the profession	2.40	C									
(241) Assist in orienting teachers who are new to the school system	3.23	C									
(242) Work with a team from the school and/or community on pertinent school activities	3.05	C									
(243) Serve community needs by contributing professional expertise to community activities	3.09	C									

The advancement of professional competencies clusters inservice need indicator of 6.52 falls in the middle of the upper quartile of inservice needs indicators. All performance elements were considered important by all service area teacher groups. See Table LIX for a summarization of these data.

Inservice need for the supervising student teachers cluster was considerably lower than the inservice need

TABLE LX. ADVANCING ONE'S PROFESSIONAL COMPETENCIES

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
G-3. Advancing One's Professional Competencies...........	NA	NA	6.21	6.52	6.91	6.76	6.55	6.48	6.52	1.22	5/175
(Performance Elements)											
(244) Exchange observational visits, innovations, and ideas with others in the profession..............	3.45	C									
(245) Consult supervisory and administrative evaluations to determine attitudes of others toward one's personal and professional abilities and limitations....................................	3.04	C									
(246) Use a self-analysis form to evaluate personal and professional abilities and limitations...........	2.94	C									
(247) Select the teaching position which is in keeping with personal and professional abilities..........	3.44	C									
(248) Maintain professional certification plus expand educational background and leadership potential thru enrolling in graduate, inservice, etc. programs....................................	3.53	C									
(250) Acquire new occupational skills and information needed to keep pace with technological advancement	3.69	C									
(251) Update professional personnel file regularly.......	3.28	C									

indicators of the other three clusters in the category. The cluster has an overall weighted importance of the above average with teachers perceiving their performance to be near the above average level. Only 150 of the possible 191 occupational teachers gave useable responses on the performance level scale. Many of the occupational teachers indicated this cluster was not applicable to their present professional role. See Table LX for a summarization of the data.

Occupational teachers feel a need for inservice education regarding their professional role and development. The weighted inservice need indicator of 6.05 for this category is third highest in the list of 10 categories tested.

There is no significant disagreement between service area occupational teacher groups on the level of inservice

TABLE LX. SUPERVISING STUDENT TEACHERS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
G-4. Supervising Student Teachers........................	NA	NA	5.19	4.86	5.50	5.28	5.49	5.13	5.18	0.53	5/145
(Performance Elements)											
(252) Provide opportunities for potential teachers to observe and participate in the public school program..	3.18	C									
(253) Interpret the policies and regulations of the local school district to the student teacher.....	2.90	C									
(254) Plan activities for the student teacher which draw upon and enrich college course work.........	2.85	C									
(255) Assign responsibilities commensurate with the student teacher's background of knowledge and experience..	3.06	C									
(256) Demonstrate instructional techniques for student teachers..	3.21	C									
(257) Consult regularly with the student teacher regarding planning, implementing, and evaluating teaching..	3.24	C									
(258) Confer regularly with the student teacher regarding performance in the student teaching situation	3.20	C									
(259) Confer with the college supervisor and the student teacher regarding plans for and evaluation of the student teaching experience......................	3.04	C									

need. Two of the four clusters in the category fall in the upper quartile of inservice need indicators with the supervising student teachers cluster falling in the lower quartile.

Evaluating Instruction (Category H)

The evaluating student performance cluster is considered more important by occupational teachers than any other cluster in this category. This cluster also has a higher inservice need indicator than any other cluster in the category. There is practically no disagreement between service area occupational teacher groups in level of inservice need. See Table LXI for a summarization of these data.

Occupational teachers regard all performance elements in the involving students in evaluation clusters as having common importance. The weighted mean inservice need indicator

TABLE LXI. EVALUATING STUDENT PERFORMANCE

Category H. Evaluating Instruction (Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-1. Evaluating Student Performance	NA	NA	6.40	6.28	6.48	6.35	6.38	6.37	6.37	0.15	5/164
(Performance Elements)											
(260) Formulate a system of grading consistent with school policy	2.98	C									
(261) Establish criteria for student performance	3.43	C									
(262) Determine student's grade based on related instruction and lab or on-the-job experience	3.37	C									
(263) Appraise students products according to performance standards of the occupation	3.25	C									
(264) Appraise students performance in relation to student performance objectives	2.99	C									
(265) Evaluate individualized assignments completed under directed study	3.02	C									

of 5.37 falls near the lower quartile of inservice need indicators, also being the lowest inservice need cluster in the evaluating instruction category. See Table LXII for a summarization of the data.

TABLE LXII. INVOLVING STUDENTS IN EVALUATION

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-2. Involving Students in Evaluation	NA	NA	5.49	5.27	5.47	5.51	5.74	5.10	5.37	1.19	5/158
(Performance Elements)											
(266) Devise self-evaluation techniques for use by students	2.77	C									
(267) Arrange for students to evaluate their own progress	2.72	C									
(268) Engage in cooperative evaluation of achievement with students	3.04	C									
(269) Involve students in formulating procedures for their participation in instructional evaluation	2.62	C									
(270) Interpret Student's evaluation of instruction	2.83	C									

There is a great range in the importance level attached to the formulating test and rating sheets cluster. Only five of the eight performance elements have common importance across service area teacher groups. The F Value of 1.54 is statistically insignificant though health teachers have a higher level of inservice need than their occupational teacher peers. See Table LXIII for a summarization of the data.

TABLE LXIII. FORMULATING TEST AND RATING SHEETS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-3. Formulating Test and Rating Sheets..................	NA	NA	5.51	5.31	5.29	5.91	5.47	5.63	5.57	1.54	5/158
(Performance Elements)											
(271) Formulate matching test items......................	2.66	C									
(272) Formulate completion test items....................	2.66	C									
(273) Formulate true-false test items....................	2.30	M									
(274) Formulate multiple-choice test items...............	2.99	C									
(275) Formulate essay test items.........................	2.02	M									
(276) Formulate test items for an oral exam..............	2.41	M									
(277) Devise laboratory performance rating sheets.......	3.21	C									
(278) Devise laboratory performance tests...............	3.26	C									

Occupational teachers regard all the performance elements in the administering and anayzing tests cluster as having common importance. The weighted inservice need indicator of 5.57 is below the median inservice need indicator level. Occupational teachers across service area groups agree on this level of inservice need. See Table LXIV for a summarization of these data.

TABLE LXIV. ADMINISTERING AND ANALYZING TESTS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-4. Administering and Analyzing Tests..................	NA	NA	5.22	5.65	5.63	5.71	5.70	5.55	5.57	0.86	5/160
(Performance Elements)											
(279) Analyze tests for reliability (consistency)........	2.91	C									
(280) Analyze tests for validity.........................	2.94	C									
(281) Devise case study problems.........................	2.65	C									
(282) Administer teacher made tests......................	3.05	C									

The inservice need indicator for evaluating quality of instruction is above the median inservice need indicator level. There is close agreement across service area teacher groups regarding this level. All three performance elements in the cluster have common importance, this cluster being the second most important cluster in the category. See Table LXV for a summarization of the data.

TABLE LXV. EVALUATING QUALITY OF INSTRUCTION

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-5. Evaluating Quality of Instruction....................	NA	NA	5.85	5.88	5.70	5.99	5.68	5.92	5.88	0.36	5/160
(Performance Elements)											
(283) Review student progress and/or achievement records to assess effectiveness of instruction...........	3.29	C									
(284) Obtain information from fellow teachers and supervisory personnel regarding one's instructional quality....................................	2.84	C									
(285) Seek opportunities for self-evaluation of instruction (video tape, audio tape, etc.)........	2.94	C									

Occupational teachers feel some but not an urgent need for inservice education in the evaluating instruction category. The overall weighted inservice need indicator of 5.75 ranks 5th of the 10 categories tested and falls .01 above the mean overall weighted inservice need indicator of 5.74.

There was no significant disagreement regarding the level of inservice need between service area teacher groups. Only one of the five cluster inservice need indicators falls in the upper quartile with none of the clusters in the lower quartile. Apparently occupational teachers perceive little need for inservice education regarding this category other than the evaluating student performance cluster.

Program Planning, Development, and Evaluation (Category I)

Sixteen of the seventeen performance elements comprising the planning, conducting, and utilizing a community survey cluster have common importance across service area teacher groups. There is agreement as to the level of inservice need. The weighted mean inservice need indicator of 5.02 falls in the center of the lower quartile of inservice need indicators. See Table LXVI for a summarization of the data.

TABLE LXVI. PLANNING, CONDUCTING, AND UTILIZING A COMMUNITY SURVEY

			INSERVICE NEED INDICATOR								
Category I. Program Planning, Development, and Evaluation (Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-1. Planning, Conducting, and Utilizing a Community Survey	NA	NA	5.12	4.93	5.42	4.88	4.63	5.21	5.02	0.81	5/156
(Performance Elements)											
(286) Organize a steering committee to assist in pre-planning community survey activities	2.48	C									
(287) Identify the geographical area in which an occupational education survey will be conducted	2.55	C									
(288) Obtain administrative approval for conducting a community survey	2.59	C									
(289) Solicit survey assistance of occupational education personnel from the state education dept/university	2.42	M									
(290) Adapt existing community survey materials to needs.	2.83	C									
(291) Consult the chamber of commerce to identify employers to contact	2.69	C									
(292) Consult the U.S. Employment Service to obtain information on manpower trends and needs	2.78	C									
(293) Persuade labor representatives to participate in the occupational education survey	2.74	C									
(294) Recruit teachers and guidance counselors to participate in conducting the occupational survey.	2.65	C									
(295) Establish communication with employer representatives who will be involved in the survey	3.07	C									
(296) Devise a plan of activities for the survey staff	2.77	C									
(297) Publicize the purposes and objectives of the survey	2.77	C									
(298) Orient the survey staff to their duties and responsibilities in collecting data	2.91	C									
(299) Collect data from employers	3.25	C									
(300) Collect student occupational interest data	2.89	C									
(301) Suggest an occupational education program based on an analysis of the occupational survey	2.99	C									
(302) Disseminate the findings of the community survey	2.75	C									

Occupational teachers find the skills involved in organizing an advisory committee to be important. There is some though statistically insignificant disagreement as to the level of inservice need by different occupational service area teacher groups. Most of this disagreement is in the importance attached to organizing an advisory committee with the level of disagreement on importance being significant statistically. Agriculture teachers find organizing an advisory committee more important than their peer occupational service area teacher groups. See Table LXVII for a summarization of these data.

TABLE LXVII. ORGANIZING AN ADVISORY COMMITTEE

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-2. Organizing an Advisory Committee	NA	NA	6.08	5.37	5.24	5.25	5.25	5.27	5.42	1.64	5/154
(Performance Elements)											
(303) Identify the role of the advisory committee	3.16	C									
(304) Establish criteria for selection of committee members	3.05	C									
(305) Obtain school board authorization for organizing the advisory committee	2.74	C									
(306) Obtain administrative approval of the selected advisory committee members	2.68	C									
(307) Publicize the establishment of the advisory committee, its members, and its functions	2.89	C									
(308) Orient the advisory committee members to their role and function	3.23	C									

Agriculture, distributive education, and business teachers find the maintenance and utilization of an advisory committee to be significantly more important than do home economics, trade and industrial, or health teachers. This overall weighted inservice need indicator of 5.29 falls in the lower quartile of inservice need indicators. All performance elements comprising this cluster have common importance. See Table LXVIII for a summarization of the data.

TABLE LXVIII. MAINTAINING AND UTILIZING AN ADVISORY COMMITTEE

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-3. Maintaining and Utilizing an Advisory Committee.....	NA	NA	5.69	5.46	5.04	5.11	5.16	5.18	5.29	0.95	5/155
(Performance Elements)											
(309) Plan the agenda to be considered by the committee.	3.08	C									
(310) Orient the advisory committee members to their role....................................	3.18	C									
(311) Invite resource persons to provide advisory committee consultation services..................	2.93	C									
(312) Serve as liaison for the advisory committee and school administration............................	2.92	C									
(313) Consult the advisory committee in planning an analysis of an occupation.......................	3.01	C									
(314) Consult the advisory committee in developing a long-range plan.................................	3.07	C									
(315) Involve the advisory committee in conducting a community occupational education survey...........	2.81	C									

Planning the occupational program is the most important of the clusters making up the program planning, development, and evaluation category. All nine performance elements have a weighted performance element mean of above average. The weighted mean inservice need indicator of 6.17 is highest of the six clusters in the category and falls near the upper quartile level in the range of inservice need indicators. See Table LXIX for a summarization of these data.

Occupational teachers in the six service areas indicate close agreement on importance, performance, and inservice need for the preparation of a long-range occupational program cluster. The weighted mean inservice need indicator of 5.49 is well below the median level of inservice need indicators. See Table LXX for a summarization of the data.

The performance elements making up the occupational program evaluation cluster received a weighted mean overall

TABLE LXIX. PLANNING THE OCCUPATIONAL PROGRAM

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-4. Planning the Occupational Program	NA	NA	6.30	6.18	6.64	6.21	6.02	5.99	6.17	0.83	5/162
(Performance Elements)											
(316) Assist in identification of occupational education purposes and objectives for the school	3.26	C									
(317) Determine the occupations for which training is to be offered	3.13	C									
(318) Analyze occupations with the assistance of employers and labor representatives	3.03	C									
(319) Identify the competencies needed for entry into an occupation	3.45	C									
(320) Describe the occupational standards of performance for each task in an occupation	3.23	C									
(321) Assist in writing general objectives for courses offered in the occupational program	3.17	C									
(322) Develop occupational courses by clustering and sequencing related tasks	3.19	C									
(323) Identify the skill, knowledge, and attitudes required for the performance of each occ. task in a course	3.34	C									
(324) Write student performance objectives for the occupational education course	3.18	C									

TABLE LXX. PREPARING A LONG-RANGE OCCUPATIONAL PROGRAM

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-5. Preparing a Long-Range Occupational Program	NA	NA	5.66	5.52	5.80	5.33	5.43	5.45	5.49	0.37	5/161
(Performance Elements)											
(325) Analyze long-range course needs for the occupational education program	3.08	C									
(326) Specify the long-range facility, equipment, and supply needs for the occupational program	3.08	C									
(327) Assist in the preparation of a long-range occ. budget	2.77	C									
(328) Identify the long-range needs for employing faculty for the occupational program	2.80	C									
(329) Assist in preparing the long-range program plan for occupational education	2.99	C									

rating of above average importance. The weighted mean inservice need indicator of 5.91 falls above the median level of inservice need indicators, being the second highest of the six clusters in this category. See Table LXXI for a summarization of the data.

TABLE LXXI. EVALUATING THE OCCUPATIONAL PROGRAM

			INSERVICE NEED INDICATOR								
(Cluster)	MPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-6. Evaluating the Occupational Program.................	NA	NA	6.00	5.76	6.33	5.92	5.40	6.08	5.91	1.50	5/159
(Performance Elements)											
(330) Maintain continual follow-up on the placement, employment, and training status of students......	3.21	C									
(331) Obtain follow-up data from employers of occupational program graduates.........................	3.21	C									
(332) Determine reasons students leave the occ. program.	3.06	C									
(333) Review supervisory evaluation reports assessing the occupational program........................	2.92	C									
(334) Assess the relevancy of the occupational course offerings..	3.21	C									
(335) Assess the adequacy of the occupational education facilities and equipment.........................	3.33	C									
(336) Disseminate a summary of the occupational education evaluation to the board of education, administrators, and advisory committee members...	2.86	C									

Occupational teachers feel little need for inservice education in the program planning, development, and evaluation category. The category had an inservice need indicator of 5.55 which placed it 9th on the list of 10 categories tested.

There was no significant disagreement between service area teacher groups regarding the level of inservice need on any of the six clusters in the category. None of the clusters fall in the upper quartile of inservice need indicators while two of the six fall in the lower quartile. Overall, occupational teachers perceive little need for inservice education in program planning, development, and evaluation.

Coordination (Category J)

Occupational teachers perceive little need for inservice programs concerning the selection of student learners. This clusters weighted mean inservice need indicator of 5.23 falls in the lower quartile of inservice need indicators. Occupational teachers indicate their performance on this cluster is at a higher level than on any other cluster in the category. All performance elements have common importance across service area teacher groups. See Table LXXII for a summarization of the data.

TABLE LXXII. SELECTING STUDENT LEARNERS

Category J. Coordination (Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR								
			Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-1. Selecting Student Learners..........................	NA	NA	5.00	5.00	6.50	5.40	4.98	5.24	5.23	2.01	5/149
(Performance Elements)											
(337) Establish criteria for selection of student-learners....................................	3.14	C									
(338) Provide prospective student-learners with resource materials on occupational opportunities..........	3.27	C									
(339) Administer occupational tests relative to student-learner selection and placement.................	2.75	C									
(340) Gather student-learner selection data............	2.76	C									
(341) Interview students and parents to obtain student-learner interest and aptitude information........	2.88	C									
(342) Identify a prospective student-learner on the basis of selection criteria and data............	2.77	C									
(343) Match a student-learner's unique characteristics with an appropriate training station............	2.93	C									

Business and health teachers find one of the performance elements comprising the selecting training stations cluster not important, otherwise, all performance elements in the cluster have common importance. There is some statistically insignificant disagreement on inservice need between service area teacher groups, distributive education teachers having a greater need for inservice education than their peer occupational teacher groups. See Table LXXIII for a summarization of the data.

TABLE LXXIII. SELECTING TRAINING STATIONS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-2. Selecting Training Stations	NA	NA	5.23	5.08	6.22	5.80	5.29	5.72	5.52	1.93	5/141
(Performance Elements)											
(344) Establish criteria for evaluating the training station potential of a business	2.89	C									
(345) Identify prospective cooperating employers to provide on-the-job training stations	3.16	C									
(346) Establish criteria to evaluate qualifications of prospective on-the-job instructors	3.00	C									
(347) Assess training capability of the on-the-job instructor of the prospective training station	2.99	C									
(348) Assess educational adequacy of the prospective training station's facilities and equipment	3.15	C									
(349) Assess safety provisions of the facilities and equipment of the prospective training station	3.16	C									
(350) Convince an employer to provide a training station for cooperative occupational education	2.96	C									
(351) Arrange with a union to make contract provisions for student-learners	2.40	M									

Occupational teachers disagree on their level of inservice need regarding training plans and agreements. Distributive education teachers indicate they have much need for inservice education on this subject while home economics, agriculture, and business teachers perceive little need for inservice programs. The overall weighted mean for the cluster falls well below the median inservice need indicator level. See Table LXXIV for a summarization of the data.

The complying with government employment regulations cluster was considered of common importance by all occupational teacher groups. The weighted mean inservice need indicator value of 5.15 falls well down in the lower quartile

TABLE LXXIV. DEVELOPING A TRAINING PLAN AND AGREEMENT

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-3. Developing a Training Plan and Agreement............	NA	NA	5.12	5.23	6.48	5.89	5.02	5.62	5.50	2.77*	5/150
(Performance Elements)											
(352) Develop a training agreement between student-learners, their parents, school, and cooperating employer......................................	3.01	C									
(353a) Arrange school and work schedules with student-learners, school, and employers..................	3.09	C									
(353b) Develop a systematic training plan with the cooperating employer and/or on-the-job instructor....................................	3.16	C									

of inservice need indicators indicating little felt teacher need for inservice programs on the subject. See Table LXXV for a summarization of the data.

TABLE LXXV. COMPLYING WITH GOVERNMENT EMPLOYMENT REGULATIONS

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-4. Complying with Government Employment Regulations....	NA	NA	5.19	4.78	5.98	5.22	4.74	5.24	5.15	1.02	5/148
(Performance Elements)											
(354) Aid student-learners in procuring work per its....	2.70	C									
(355) Assist the cooperating employer in obtaining information concerning federal/state wage classifications..................................	2.63	C									
(356) Assist the cooperating employer in acquiring a federal permit to pay a training wage............	2.57	C									
(357) Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation............................	2.78	C									

There is a high level of disagreement between occupational teacher groups regarding their need for inservice programs on the supervising student-learner's on-the-job experience cluster. Teachers agree on the level of importance but disagree significantly on their performance level. All seventeen performance elements are considered to have common importance. See Table LXXVI for a summarization of the data.

TABLE LXXVI. SUPERVISING STUDENT-LEARNER'S ON-THE-JOB EXPERIENCE

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-5. Supervising Student-Learner's On-The-Job Experience. (Performance Elements)	NA	NA	5.09	5.24	5.99	6.69	5.88	5.46	5.74	6.41*	5/147
(358) Prepare the student-learner for an interview with the cooperating employer and training station personnel	3.30	C									
(359) Assist the student-learner in on-the-job training orientation	3.24	C									
(360) Assist the cooperating employer's personnel in accepting the training status and role of the student-learner	3.04	C									
(361) Maintain good working relationships with training station personnel	3.37	C									
(362) Develop a procedure to insure student's safety	3.32	C									
(363) Develop a plan for supervision of on-the-job training	3.32	C									
(364) Inform the administration of coordination itinerary	3.01	C									
(365) Assess the on-the-job experience daily reports with the student-learner to plan future instruction	3.02	C									
(366) Encourage the on-the-job instructor to follow the training plan in providing experiences for the student	3.09	C									
(367) Maintain the student-learner's progress reports for on-the-job training and related instruction	3.16	C									
(368) Examine the student-learner's progress reports to determine future on-the-job training experiences and related instruction	3.20	C									
(369) Maintain a record of individual work hours, wages, and work experiences of on-the-job training	2.87	C									
(370) Assist the student-learner in the solution of problems related to on-the-job training	3.34	C									
(371) Control student-learner absenteeism from school and on-the-job training	3.08	C									
(372) Control the transfer of student-learners within the cooperative occ. ed. program and other school programs	2.74	C									
(373) Conduct termination procedures for on-the-job training when conditions demand it	3.00	C									
(374) Sponsor an employer-employee appreciation event	2.69	C									

Occupational teacher service area groups disagree on the level of importance, performance, and inservice need as far as evaluating the student learner's on-the-job performance is concerned. This cluster's overall weighted mean inservice need indicator of 6.17 is highest of the seven clusters in the coordination category. See Table LXXVII for a summarization of the data.

TABLE LXXVII. EVALUATING THE STUDENT-LEARNER'S ON-THE-JOB PERFORMANCE

			INSERVICE NEED INDICATOR								
(Cluster)	WPEM	IMP	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-6. Evaluating the Student-Learner's On-The-Job Performance	NA	NA	5.83	5.36	6.42	7.11	6.26	5.90	6.17	5.50*	5/149
(Performance Elements)											
(375) Evaluate the student-learner's work qualities and habits on the job	3.40	C									
(376) Evaluate the student-learner's personal traits and characteristics on the job	3.29	C									
(377) Check the student-learner's progress in acquiring skills on the job	3.42	C									
(378) Check the student-learner's progress with the on-the-job instructor and other training station personnel	3.38	C									
(379) Assess the student-learner's performance with the assistance of the on-the-job instructor	3.36	C									

Occupational teacher service area groups agree on the level of importance to attach to the improving related and on-the-job instruction cluster but disagree significantly on their performance level as well as their need for inservice education. The five performance elements in the cluster have common importance and the weighted mean inservice need indicator of 5.94 falls above the median on the inservice need indicator list. See Table LXXVIII for a summarization of the data.

Occupational teachers feel very little need for inservice education on the coordination category with the exception of the evaluating student-learner's on-the-job performance cluster. The category had an overall weighted inservice need indicator of 5.61 as compared to the mean of 5.74. Of the ten categories tested, the coordination category ranked 8th in inservice need.

TABLE LXXVIII. IMPROVING RELATED AND ON-THE-JOB INSTRUCTION

(Cluster)	WPEM	IMP	INSERVICE NEED INDICATOR Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-7. Improving Related and On-The-Job Instruction........	NA	NA	5.48	5.28	6.00	6.71	5.89	5.95	5.94	4.57*	5/147
(Performance Elements)											
(380) Obtain suggestions from the on-the-job instructor to guide the selection of lessons for related instruction....................................	3.32	C									
(381) Evaluate the quality of the on-the-job training received by the student-learner..................	3.33	C									
(382) Assist the on-the-job instructor with development of teaching techniques during supervisor visits..	2.95	C									
(383) Update related instruction for student-learners on the basis of information on technology obtained from cooperating employers..............	3.39	C									
(384) Obtain information from the advisory committee on ways to improve related instruction and on-the-job training..................................	3.13	C									

There was significant disagreement between service area occupational teacher groups regarding the level of inservice need on four of the seven clusters. None of the clusters fall in the upper quartile of inservice need indicators while two fall in the lower quartile. Overall, there is more service area teacher group disagreement in this category than on any of the other categories tested.

Category Level Inservice Need

The weighted mean importance level attached to categories of clusters ranges from a low of 2.43 to a high of 3.23. Occupational teachers gave an even wider range of performance levels with the low performance level being 3.10 and the high level averaging 1.97. With this spread of importance and performance values, the weighted category level inservice need indicator ranges from a high of 6.32 to a low of 4.39. Table LXXIX gives an overview of the category level importance, performance, and inservice need indicator values with the inservice need indicator values ranked from high to low.

TABLE LXXIX. CATEGORY LEVEL IMPORTANCE, PERFORMANCE, AND INSERVICE NEED INDICATOR RATINGS BY OCCUPATIONAL TEACHERS IN NEW YORK STATE

Category Number and Title	Importance Rating	Performance Rating	Inservice Need Indicator Rating	Inservice Need Indicator Rank
A - Executing (Implementing) Instruction	2.83	2.83	5.66	7th
B - Management	3.23	3.10	6.32*	1st
C - School-Community Relations	3.02	2.73	5.73*	6th
D - Planning Instruction	3.11	3.00	6.11	2nd
E - Guidance	2.91	2.85	5.77*	4th
F - Student Occupational Organizations	2.43	1.97	4.39*	10th
G - Professional Role and Development	3.20	2.86	6.05*	3rd
H - Evaluating Instruction	2.92	2.83	5.75	5th
I - Program Planning, Development, and Evaluation	3.00	2.55	5.55	9th
J - Coordination	3.05	2.57	5.61*	8th

*The weighted inservice need indicator values are ascertained by adding individual teachers importance and performance ratings. The inservice need indicator for these categories does not precisely reflect the individual values for importance due to rounding of numbers and some teachers rating only importance or performance.

Cluster Level Inservice Need

The weighted inservice need indicator for occupational teachers at the cluster level ranges from a high of 7.02 to a low of 4.05. There is insignificant statistical variance between service area occupational teacher group responses on forty-two of the fifty-seven clusters. Table LXXX presents the cluster titles plus the weighted inservice need indicator and F value for each.

TABLE LXXX. CLUSTER LEVEL INSERVICE NEED INDICATOR RATINGS BY OCCUPATIONAL TEACHERS IN NEW YORK STATE

Cluster Number and Title	Weighted Inservice Need Indicator	F Value
A-1. Utilizing Traditional Educational Technology	5.06	0.57
A-2. Utilizing Innovative Educational Technology	4.05	2.22
A-3. Utilizing Visual Aids	6.06	0.63
A-4. Employing Group Interaction Techniques	5.28	2.70*
A-5. Employing Teacher-Centered Methods of Presentation	6.47	1.13
A-6. Applying Basic Instructional Strategies	6.30	1.97
A-7. Utilizing Community Resources	5.72	3.71*
A-8. Directing Instruction by Students	5.70	0.77
A-9. Directing Laboratory Instruction	6.48	0.83
A-10. Directing Independent Study	5.46	2.37*
B-1. Projecting Instructional Resource Needs	6.53	2.13

TABLE LXXX. CONTINUED

Cluster Number and Title	Weighted Inservice Need Indicator	F Value
B-2. Preparing the Annual Budget	5.71	3.55*
B-3. Procuring Supplies and Facilities	5.70	4.88*
B-4. Maintaining Records and Files	6.10	0.52
B-5. Assuring Laboratory Safety	6.69	2.40*
B-6. Establishing Acceptable Student Behavior	7.02	1.23
B-7. Managing the Laboratory	6.52	1.85
C-1. Planning School-Community Relations Activities	5.31	2.32*
C-2. Publicizing Occupational Education and the School's Occupational Program	5.37	1.99
C-3. Maintaining Good School-Community Relations	5.77	1.08
C-4. Obtaining School-Community Feedback on the Occupational Program	5.46	1.78
C-5. Maintaining Good Intra-School Relationships	6.75	1.26
D-1. Structuring/Designing a Course	6.23	1.34
D-2. Planning a Lesson	6.15	7.00*
D-3. Selecting Instructional Materials	6.51	1.60
D-4. Developing Instructional Materials	5.56	2.15
E-1. Obtaining Background Information on Students	4.87	1.89
E-2. Promoting Construction Teacher-Student Relationships	6.17	1.92
E-3. Counseling Students	5.82	2.69*

TABLE LXXX. CONTINUED

Cluster Number and Title	Weighted Inservice Need Indicator	F Value
E-4. Involving Guidance Counselors in Assisting Students	5.92	2.17
E-5. Involving Other Persons and Agencies in Assisting Students	5.19	2.43*
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	6.62	0.75
F-1. Establishing a Student Occupational Organization	4.45	2.19
F-2. Advising a Student Occupational Organization	4.31	2.39*
F-3. Participating in State and National Student Occupational Organization Activities	4.42	1.22
G-1. Upholding the Philosophy and Goals of the Profession	6.76	1.86
G-2. Contributing Professional Service	5.75	0.27
G-3. Advancing One's Professional Competencies	6.52	1.22
G-4. Supervising Student Teachers	5.18	0.53
H-1. Evaluating Student Performance	6.37	0.15
H-2. Involving Students in Evaluation	5.37	1.18
H-3. Formulating Test and Rating Sheets	5.57	1.54
H-4. Administering and Analyzing Tests	5.57	0.86
H-5. Evaluating Quality of Instruction	5.88	0.36
I-1. Planning, Conducting, and Utilizing a Community Survey	5.02	0.81

TABLE LXXX. CONTINUED

Cluster Number and Title	Weighted Inservice Need Indicator	F Value
I-2. Organizing an Advisory Committee	5.42	1.64
I-3. Maintaining and Utilizing an Advisory Committee	5.29	0.95
I-4. Planning the Occupational Program	6.17	0.83
I-5. Preparing a Long-Range Occupational Program	5.49	0.37
I-6. Evaluating the Occupational Program	5.91	1.50
J-1. Selecting Student Learners	5.23	2.01
J-2. Selecting Training Stations	5.52	1.93
J-3. Developing a Training Plan and Agreement	5.50	2.77*
J-4. Complying With Government Employment Regulations	5.15	1.02
J-5. Supervising Student-Learner's On-The-Job Experience	5.74	6.41*
J-6. Evaluating the Student Learner's On-The-Job Performance	6.17	5.50*
J-7. Improving Related and On-The-Job Instruction	5.94	4.57*

*The F Value is significant at the .05 level if it is equal to or exceeds 2.28.

Occupational Teacher-Supervisor Agreement on Inservice Need

The researchers randomly picked one occupational teacher from each school's participating teachers and assigned him/her to their immediate supervisor for rating purposes. The supervisor was asked to rate the degree of importance he/she felt should be attached to each performance element for an occupational teacher in the assigned teachers specialization. The assigned teacher's performance level was rated relative to the supervisors perception of optimum performance by an occupational teacher in the assigned teachers specialty. Table LXXXI indicates the number of supervisor-teacher rating

TABLE LXXXI. EXPECTED SUPERVISOR/TEACHER CORRELATION RATING COMBINATIONS IF 100 PERCENT OF THE SUPERVISOR AND TEACHER SAMPLE PARTICIPATE

Service Area	Part A	Part B	Part C	Total
Agriculture	3	2	4	9
Business	8	8	4	20
Distributive Education	1	1	1	3
Health	2	5	3	10
Home Economics	2	2	2	6
Trade and Industrial	9	6	8	23
	25	24	22	71

combinations the researcher would receive if 100 percent of the teacher and supervisor sample returned useable data. Part A includes categories A, B, and C; Part B includes categories D, E, F, and G; Part C includes categories H, I, and J.

Seventeen useable teacher-supervisor data combinations were received for categories A, B, and C; fifteen combinations were received for categories D, E, F, and G; fourteen combinations were received for categories H, I, and J. Table LXXXII indicates the number of combinations received from each service area teacher group.

TABLE LXXXII. RECEIVED SUPERVISOR/TEACHER CORRELATION RATING COMBINATIONS--90 PERCENT SUPERVISOR PARTICIPATION AND 76 PERCENT OCCUPATIONAL TEACHER PARTICIPATION

Service Area	Part A	Part B	Part C	Total
Agriculture	3	2	3	8
Business	6	5	3	14
Distributive Education	1	0	1	2
Health	1	3	1	5
Home Economics	0	0	1	1
Trade and Industrial	6	5	5	16
	17	15	14	46

Table LXXXIII explicates the correlation of occupational teacher-occupational supervisor ratings at the cluster level for importance, performance, and inservice need. The number in parenthesis following each correlation value is the number of teacher-supervisor respondent pairs providing useable data. The correlations range from a +.77 to a -.65.

TABLE LXXXIII. CORRELATION OF OCCUPATIONAL TEACHER-SUPERVISOR RATINGS AT IMPORTANCE, PERFORMANCE, AND INSERVICE LEVELS

	Importance Correlation		Performance Correlation		Inservice Need Correlation*	
A-1. Utilizing Traditional Educational Technology	.14	(17)	.13	(17)	.11	(17)
A-2. Utilizing Innovative Educational Technology	-.19	(17)	-.03	(16)	.04	(16)
A-3. Utilizing Visual Aids	-.18	(17)	.32	(17)	.16	(17)
A-4. Employing Group Interaction Techniques	-.17	(17)	.45	(17)	.42	(17)
A-5. Employing Teacher-Centered Methods of Presentation	.03	(17)	-.34	(17)	-.33	(17)
A-6. Applying Basic Instructional Strategies	-.33	(17)	.31	(17)	.22	(17)
A-7. Utilizing Community Resources	-.10	(17)	.29	(17)	.26	(17)
A-8. Directing Instruction by Students	-.31	(17)	-.03	(17)	-.21	(17)
A-9. Directing Laboratory Instruction	-.08	(17)	.11	(17)	.11	(17)
A-10. Directing Independent Study	.23	(17)	-.10	(17)	.11	(17)
B-1. Projecting Instructional Resource Needs	-.56*	(17)	-.02	(17)	-.37	(17)
B-2. Preparing the Annual Budget	-.03	(17)	-.08	(16)	-.05	(16)
B-3. Procuring Supplies and Facilities	.13	(17)	.01	(17)	.02	(17)
B-4. Maintaining Records and Files	-.36	(17)	-.52*	(17)	-.44	(17)
B-5. Assuring Laboratory Safety	.73*	(16)	.51	(14)	.68*	(14)
B-6. Establishing Acceptable Student Behavior	-.12	(17)	-.08	(17)	-.14	(17)
B-7. Managing the Laboratory	.12	(17)	.04	(17)	.14	(17)

TABLE LXXXIII. CONTINUED

	Importance Correlation		Performance Correlation		Inservice Need Correlation*	
C-1. Planning School-Community Relations Activities	.52*	(17)	.43	(16)	.52*	(16)
C-2. Publicizing Occupational Education and the School's Occupational Program	.17	(17)	-.09	(17)	-.07	(17)
C-3. Maintaining Good School-Community Relations	.15	(17)	-.03	(17)	-.09	(17)
C-4. Obtaining School-Community Feedback on the Occupational Program	-.15	(17)	-.04	(14)	-.08	(14)
C-5. Maintaining Good Intra-School Relationships	.12	(17)	.14	(17)	.14	(17)
D-1. Structuring/Designing a Course	.63*	(15)	-.14	(12)	.36	(12)
D-2. Planning a Lesson	-.12	(15)	.57*	(13)	-.05	(13)
D-3. Selecting Instructional Materials	.56*	(15)	.21	(13)	.52	(13)
D-4. Developing Instructional Materials	.21	(15)	.28	(12)	.42	(12)
E-1. Obtaining Background Information on Students	-.04	(15)	.25	(14)	.12	(14)
E-2. Promoting Constructive Teacher-Student Relationships	.37	(15)	.13	(13)	.38	(13)
E-3. Counseling Students	.27	(15)	-.02	(14)	.17	(14)
E-4. Involving Guidance Counselors in Assisting Students	.26	(15)	-.14	(14)	.12	(14)
E-5. Involving Other Persons and Agencies in Assisting Students	-.20	(15)	.19	(13)	.21	(13)

TABLE LXXXIII. CONTINUED

	Importance Correlation		Performance Correlation		Inservice Need Correlation*	
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	-.33	(15)	.00	(12)	-.02	(12)
F-1. Establishing a Student Occupational Organization	.47	(14)	.46	(13)	.57*	(13)
F-2. Advising a Student Occupational Organization	.57*	(14)	.60*	(12)	.67*	(12)
F-3. Participating in State and National Student Occupational Organization Activities	.24	(14)	.63*	(13)	.44	(13)
G-1. Upholding the Philosophy and Goals of the Profession	.23	(14)	-.03	(13)	.60*	(13)
G-2. Contributing Professional Service	.01	(14)	.62*	(12)	.77*	(12)
G-3. Advancing One's Professional Competencies	.20	(14)	-.16	(12)	.10	(12)
G-4. Supervising Student Teachers	-.20	(11)	.10	(9)	-.23	(9)
H-1. Evaluating Student Performance	.16	(14)	-.35	(14)	-.18	(14)
H-2. Involving Students in Evaluation	-.43	(14)	-.03	(14)	-.45	(14)
H-3. Formulating Test and Rating Sheets	-.12	(14)	.26	(14)	.13	(14)
H-4. Administering and Analyzing Tests	-.45	(14)	-.29	(14)	-.58*	(14)
H-5. Evaluating Quality of Instruction	-.47	(14)	.23	(13)	-.03	(13)
I-1. Planning, Conducting, and Utilizing a Community Survey	-.48	(13)	.38	(14)	.09	(13)
I-2. Organizing an Advisory Committee	.24	(14)	.54	(12)	.43	(12)

TABLE LXXXIII. CONTINUED

	Importance Correlation		Performance Correlation		Inservice Need Correlation*	
I-3. Maintaining and Utilizing an Advisory Committee	-.65*	(13)	.30	(13)	-.06	(13)
I-4. Planning the Occupational Program	-.07	(13)	-.11	(12)	-.46	(12)
I-5. Preparing a Long-Range Occupational Program	.19	(12)	.24	(12)	.37	(12)
I-6. Evaluating the Occupational Program	.29	(13)	.19	(12)	.27	(12)
J-1. Selecting Student Learners	-.19	(14)	-.23	(13)	-.32	(13)
J-2. Selecting Training Stations	.03	(14)	-.21	(11)	.26	(11)
J-3. Developing a Training Plan and Agreement	-.09	(12)	.57	(11)	.46	(11)
J-4. Complying With Government Employment Regulations	-.11	(12)	.62*	(13)	.49	(12)
J-5. Supervising Student-Learner's On-The-Job Experience	.30	(12)	-.16	(11)	.21	(11)
J-6. Evaluating the Student Learner's On-The-Job Performance	.42	(12)	.09	(12)	.50	(12)
J-7. Improving Related and On-The-Job Instruction	.33	(12)	-.03	(12)	.25	(12)

*The correlation is significant at the .05 level if it is equal to or exceeds .66 for 9 respondent pairs, .63 for 10 respondent pairs, .60 for 11 respondent pairs, .58 for 12 respondent pairs, .55 for 13 respondent pairs, .53 for 14 respondent pairs, .51 for 15 respondent pairs, .50 for 16 respondent pairs, and .48 for 17 respondent pairs.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study identified the perceived professional education inservice needs of secondary level occupational teachers in New York State. Existing certification routes of less than college graduate level have produced a large number of occupational teachers whose professional competence is relatively unknown to teacher educators and state level supervisors who have responsibilities for developing inservice programs that will assist the teacher in upgrading his/her professional skills. This study provides information that will make a beginning toward solving this problem by providing planning data on which individuals and agencies who have professional education inservice responsibilities can develop their programs.

Purpose and Objectives

Purpose.--The major purpose of this study was the identification of performance-based professional education needs of secondary level occupational teachers in New York State.

Objectives.--To accomplish this purpose, the following objectives were established:

1. To identify performance elements that are perceived as important from the viewpoint of secondary level:
    - (a) agriculture teachers.
    - (b) business teachers.
    - (c) distributive education teachers.
    - (d) health teachers.
    - (e) home economics teachers.
    - (f) trade and industrial teachers.
2. To ascertain the perceived performance level of:
    - (a) agriculture teachers.
    - (b) business teachers.
    - (c) distributive education teachers.
    - (d) health teachers.
    - (e) home economics teachers.
    - (f) trade and industrial teachers.
3. To determine if significant differences exist between agriculture, business, distributive education, health, home economics, and trade and industrial teachers regarding their perception of inservice need.
4. To correlate the occupational teacher's perception of inservice need on identified performance clusters with the perceptions of his/her immediate supervisor.
5. To identify the performance-based professional education program(s) needed inservice by secondary level occupational teachers in New York State.

Research Hypotheses

To accomplish the objectives of the study, the following hypotheses were established:

1. There are no significant differences between New York State secondary level teachers of agriculture, business, distributive education, health, home economics, and trade and industry regarding their need for inservice education.
2. There are no significant differences between New York State secondary level occupational teacher's perception of training need inservice and the perception of the occupational teacher's immediate supervisor.

Procedure

This study involved occupational teachers and supervisors in BOCES Centers and vocational high schools throughout New York State exclusive of New York City. The director of occupational education in each of the state's 77 centers was contacted regarding participation in the study and all responded favorably.

All occupational teachers in New York State were identified from the Directory of New York State Vocational Education Personnel and listed by name and subject taught. From this master list, teachers were segregated via service area titles of agriculture teacher, business teacher, distributive education teacher, health teacher, home economics teacher, and trade and industrial teacher (Appendix F). Using a systematic selection technique, the study sample was drawn for each service area. From each school's list of participating teachers, one teacher was randomly selected and assigned to his/her supervisor for rating purposes. The final study group included 677 occupational teachers and 70 occupational supervisors.

A review of research and literature was conducted to collect performance behaviors of occupational teachers. The tentative list of behaviors or performance elements was subjected to a review by a panel of six occupational consultants and then field tested. Appropriate revision was incorporated into the final instrument.

The coded instruments, a cover letter explaining the project, and directions were mailed in individual packages to teachers and supervisors. Two follow-up letters were mailed to non-responding teachers and one to non-responding supervisors. The second follow-up letter to teachers included a coded post card for the teacher to use in requesting a replacement instrument if his/hers was inadvertently misplaced.

All data were coded for keypunching on IBM cards. Two separate FORTRAN Language Computer Programs were written, one to analyze the data for importance level, performance level, and inservice need and the other to correlate the teacher-supervisor pair ratings.

The following analyses were performed:

1. Presentation and classification of performance elements as having common, mixed, or no importance to occupational teachers in the six service area teacher groups.
2. Presentation of the overall importance level and performance level of each of the six occupational teacher groups. The one-way analysis of variance was used to ascertain if differences exist between service area groups.
3. Presentation and discussion of cluster level tables identifying the weighted inservice need indicator for each occupational service area teacher group as well as the combined weighted inservice need indicator for the cluster. Analysis included the one-way analysis of variance to determine if significant differences existed between groups at the .05 level.
4. Presentation and discussion of tables correlating the teacher-supervisor cluster level response on importance, performance, and inservice need. Analysis included identifying those correlation coefficients that are significant at the .05 level.
5. Presentation and discussion of a table identifying a forty-two cluster core inservice curricula which included those clusters found to have a similar level of inservice need across service area occupational teacher groups.

6. Presentation and discussion of a table identifying the fifteen clusters on which service area occupational teacher groups did not agree on their level of inservice need.
7. Presentation and discussion of tables identifying a total curricula of 57 clusters for each of the six service area teacher groups rank-ordered from highest level of inservice need to lowest level of inservice need.

Summary of Findings

Findings reported in this study are based upon data collected from six respondent occupational teacher groups segregated via service area and one group of occupational supervisors. These groups and sample sizes were:

Agriculture Teachers --------------------	91
Business Teachers ----------------------	86
Distributive Education Teachers ---------	21
Health Teachers ------------------------	112
Home Economics Teachers -----------------	43
Trade and Industrial Teachers -----------	162
Occupational Supervisors ----------------	64
TOTAL	579

Forty-five percent of the occupational teachers who responded to the research were female and fifty-five percent were male. Age varies greatly with the median age being 40-49 years. Fifty-nine percent of the occupational teachers have completed at least a bachelors degree. Sixty-five percent of the teachers have completed over 18 semester hours of professional education exclusive of student teaching. About half of the occupational teachers have completed a student teaching experience and half have not. Approximately half of the teachers have taught over 5 years with half having five or less years teaching experience. Over fifty percent of the teachers have in excess of 10 years related occupational experience.

The median age of supervisors is also 40-49 years. Sixty-three percent of the supervisors have completed post-masters level study with only two of the sixty-four supervisors having less than a bachelors degree. All supervisors had teaching experience. The modal response for frequency of classroom/laboratory observation was 3 times per academic year. The length of observation ranged from less than 10 minutes to over 80 minutes per observation.

Of the 365 performance elements comprising the research instrument, 313 had common importance across service area occupational teacher groups. Fifty of the performance elements were classified as having mixed importance and 2 were classified as not important. On 281 of the 365 performance elements there was no significant difference at the .05 level in importance attached by occupational teachers in each of the six service area teacher groups. There was also no significant difference at the .05 level in the inservice need responses of the six service area occupational teacher groups on forty-two of the fifty-seven clusters.

Category Level Inservice Need

Table LXXXIV lists inservice need at the category level from the category on which occupational teachers have greatest need to the category on which they have least need. The

TABLE LXXXIV. CATEGORY LEVEL INSERVICE NEED RANKED FROM GREATEST TO LEAST NEED

Category Number and Title	Clusters in Category	Weighted Inservice Need Indicator	Rank of Weighted Inservice Need Indicator
B. Management	7	6.32	1st
D. Planning Instruction	4	6.11	2nd
G. Professional Role and Development	4	6.05	3rd
E. Guidance	6	5.77	4th
H. Evaluating Instruction	5	5.75	5th
C. School-Community Relations	5	5.73	6th
A. Executing (Implementing) Instruction	10	5.66	7th
J. Coordination	7	5.61	8th
I. Program Planning, Development and Evaluation	6	5.55	9th
F. Student Occupational Organizations	3	4.39	10th

weighted overall inservice need indicator value is 5.74. Management, planning instruction, and professional role and development all have values over 6.00 with student occupational organizations bringing up last place at an inservice need indicator value of 4.39. The 4.39 value is 1.16 points below the next-to-last place value.

Cluster Level Core Inservice Need

There was no significant difference at the .05 level in the inservice need value occupational teachers in the six service area teacher groups gave forty-two of the fifty-seven clusters. These core clusters are explicated in Table LXXXV, the core cluster having the highest inservice need indicator value being listed first with other clusters being listed in rank order.

TABLE LXXXV. CLUSTERS ON WHICH SIX SERVICE AREA OCCUPATIONAL TEACHER GROUPS AGREE ON THEIR LEVEL OF INSERVICE NEED

Cluster Number and Title	Inservice Need Indicator	F Value
B-6. Establishing Acceptable Student Behavior	7.02	1.23
G-1. Upholding the Philosophy and Goals of the Prof.	6.76	1.86
C-5. Maintaining Good Intra-School Relationships	6.75	1.26
E-6. Assisting Students in Planning Post-Secondary Education and/or Seucuring Employment	6.62	0.75
B-1. Projecting Instructional Resource Needs	6.53	2.13

TABLE LXXXV. CONTINUED

Cluster Number and Title	Inservice Need Indicator	F Value
G-3. Advancing One's Professional Competencies	6.52	1.22
B-7. Managing the Laboratory	6.52	1.85
D-3. Selecting Insturctional Resources	6.51	1.60
A-9. Directing Laboratory Instruction	6.48	0.83
A-5. Employing Teacher-Centered Methods of Present.	6.47	1.13
H-1. Evaluating Student Performance	6.37	0.15
A-6. Applying Basic Instructional Strategies	6.30	1.97
D-1. Structuring/Designing a Course	6.23	1.34
E-2. Promoting Constructive Teacher-Student Relationships	6.17	1.92
I-4. Planning the Occupational Program	6.17	0.83
B-4. Maintaining Records and Files	6.10	0.52
A-3. Utilizing Visual Aids	6.06	0.63
E-4. Involving Guidance Counselors in Assisting Students	5.92	2.17
I-6. Evaluating the Occupational Program	5.91	1.50
H-5. Evaluating Quality of Instruction	5.88	0.36
C-3. Maintaining Good School-Community Relations	5.77	1.08
G-2. Contributing Professional Service	5.75	0.27
A-8. Directing Instruction by Students	5.70	0.77
H-3. Formulating Test and Rating Sheets	5.57	1.54
H-4. Administering and Analyzing Tests	5.57	0.86
D-4. Developing Instructional Materials	5.56	2.15
J-2. Selecting Training Stations	5.52	1.93
I-5. Preparing a Long-Range Occupational Program	5.49	0.37
C-4. Obtaining School-Community Feedback on the Occupational Program	5.46	1.78
I-2. Organizing an Advisory Committee	5.42	1.64
H-2. Involving Students in Evaluation	5.37	1.19
C-2. Publicizing Occupational Education and the School's Occupational Program	5.37	1.99
I-3. Maintaining and Utilizing an Advisory Committee	5.29	0.95
J-1. Selecting Student Learners	5.23	2.01
G-4 Supervising Student Teachers	5.18	0.53
J-4. Complying With Government Employment Regulations	5.15	1.08

TABLE LXXXV. CONTINUED

Cluster Number and Title	Inservice Need Indicator	F Value
A-1. Utilizing Traditional Educational Technology	5.06	0.57
I-1. Planning, Conducting, and Utilizing a Community Survey	5.02	0.81
E-1. Obtaining Background Information on Students	4.87	1.89
F-1. Establishing a Student Occupational Organization	4.45	2.19
F-3. Participation in State and National Student Occupational Organization Activities	4.42	1.22
A-2. Utilizing Innovative Educational Technology	4.05	2.22

Cluster Level Service Area Inservice Need (Significant Disagreement)

There was significant difference at the .05 level on the inservice need indicated by the six service area occupational teacher groups. Table LXXXVI lists the 15 cluster numbers and titles, F Value, overall weighted inservice need indicator value, and the inservice need indicator value of the six service area occupational teacher groups.

TABLE LXXXVI. CLUSTERS ON WHICH SERVICE AREA OCCUPATIONAL TEACHER GROUPS SIGNIFICANTLY DISAGREE ON THEIR LEVEL OF INSERVICE NEED

Cluster Number and Title	F Val	OINI[a]	Inservice Need Indicator					
			Ag	B	DE	H	HEc	T&I
B-5. Assuring Laboratory Safety	2.40*	6.69	7.02	6.40	6.00	6.73	6.17	6.97
J-6. Evaluating The Student Learners On-The-Job Performance	5.50*	6.17	5.83	5.36	6.42	7.11	6.26	5.90
D-2. Planning a Lesson	7.00*	6.15	5.56	6.09	6.10	6.64	6.68	6.03
J-7. Improving Related and On-The-Job Instruction	4.57*	5.94	5.48	5.28	6.00	6.71	5.89	5.95
E-2. Counseling Students	2.69*	5.82	5.56	5.50	5.90	6.09	6.40	5.73
J-5. Supervising Student Learner's On-The-Job Experience	6.41*	5.74	5.09	5.24	5.99	6.69	5.88	5.46
A-7. Utilizing Community Resources	3.71*	5.72	5.86	5.63	6.27	5.88	6.41	5.14
B-2. Preparing an Annual Budget	3.55*	5.71	6.13	5.72	6.27	4.82	5.83	5.96
B-3. Procuring Supplies and Facilities	4.88*	5.70	5.96	5.82	6.52	4.91	5.47	6.01
J-3. Developing a Training Plan and Agreement	2.77*	5.50	5.12	5.23	6.48	5.89	5.02	5.62
A-10. Directing Independent Study	2.37*	5.46	5.37	6.09	4.96	5.58	5.07	5.33
C-1. Planning School-Community Relations Activities	2.32*	5.31	5.38	5.56	5.83	5.27	5.92	4.80
A-4. Employing Group Interaction Techniques	2.70*	5.28	4.82	5.18	5.96	5.43	5.97	5.02
E-5. Involving Other Persons and Agencies in Assisting Students	2.43*	5.19	5.12	5.48	4.98	5.14	5.92	4.88
F-2. Advising a Student Occupational Org.	2.39*	4.31	4.65	4.48	5.41	4.14	3.62	4.12

a. Overall Inservice Need Indicator.

* Statistically significant at the .05 level if equal to or exceeds 2.28.

Service Area Inservice Need

The six service area occupational teacher groups agree on their level of inservice need on 42 clusters and disagree on 15. The researcher has previously listed the core clusters and the clusters on which the service area teacher groups disagree. Following are the inservice needs listed from greatest to least by cluster title for agriculture, business, distributive education, health, home economics, and trade and industrial teachers. The fifteen clusters on which there was significant disagreement have been asterisked.

Agriculture Teachers

Of the fifteen clusters on which there is significant disagreement between service area occupational teacher groups regarding level of inservice need, agriculture teachers place one of the clusters in the upper quartile of weighted inservice need indicators and five in the lower quartile. The weighted overall inservice need indicator for occupational teachers is higher than the agriculture teacher's inservice need indicator on eight of the clusters and the agriculture teacher's inservice need indicator is higher on seven. See Table LXXXVII for agriculture teacher's inservice needs.

TABLE LXXXVII. CLUSTER LEVEL INSERVICE NEEDS FOR OCCUPATIONAL TEACHERS IN THE SERVICE AREA OF AGRICULTURE

Cluster Number and Title	Inservice Need Indicator Value	F Value*
B-6. Establishing Acceptable Student Behavior	7.02	1.23
B-5. Assuring Laboratory Safety	7.02	2.40*
G-1. Upholding the Philosophy and Goals of the Profession	6.76	1.86
C-5. Maintaining Good Intra-School Relationships	6.75	1.26
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	6.62	0.75
B-1. Projecting Instructional Resource Needs	6.53	2.13
G-3. Advancing One's Professional Competencies	6.52	1.22
B-7. Managing the Laboratory	6.52	1.85
D-3. Selecting Instructional Resources	6.51	1.60
A-9. Directing Laboratory Instruction	6.48	0.83
A-5. Employing Teacher-Centered Methods of Presentation	6.47	1.13
H-1. Evaluating Student Performance	6.37	0.15
A-6. Applying Basic Instructional Strategies	6.30	1.97
D-1. Structuring/Designing a Course	6.23	1.34
E-2. Promoting Constructive Teacher-Student Relationships	6.17	1.92
I-4. Planning the Occupational Program	6.17	0.83
B-2. Preparing an Annual Budget	6.13	3.55*
B-4. Maintaining Records and Files	6.10	0.52
A-3. Utilizing Visual Aids	6.06	0.63
B-3. Procuring Supplies and Facilities	5.96	4.88*
E-4. Involving Guidance Counselors in Assisting Students	5.92	2.17
I-6. Evaluating the Occupational Program	5.91	1.50
H-5. Evaluating Quality of Instruction	5.88	0.36
A-7. Utilizing Community Resources	5.86	3.71*
J-6. Evaluating The Student Learners On-The-Job Performance	5.83	5.50*
C-3. Maintaining Good School-Community Relations	5.77	1.08
G-2. Contributing Professional Service	5.75	0.27
A-8. Directing Instruction by Students	5.70	0.77
H-3. Formulating Test and Rating Sheets	5.57	1.54
H-4. Administering and Analyzing Tests	5.57	0.86
D-4. Developing Instructional Materials	5.56	2.15

TABLE LXXXVII. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value*
D-2. Planning a Lesson	5.56	7.00*
E-2. Counseling Students	5.56	2.69*
J-2. Selecting Training Stations	5.52	1.93
I-5. Preparing a Long-Range Occupational Program	5.49	0.37
J-7. Improving Related and On-The-Job Instruction	5.48	4.57*
C-4. Obtaining School-Community Feedback on the Occupational Program	5.46	1.78
I-2. Organizing an Advisory Committee	5.42	1.64
C-1. Planning School-Community Relations Activities	5.38	2.32*
H-2. Involving Students in Evaluation	5.37	1.19
C-2. Publicizing Occupational Education and the School's Occupational Program	5.37	1.99
A-10. Directing Independent Study	5.37	2.37*
I-3. Maintaining and Utilizing an Advisory Committee	5.29	0.95
J-1. Selecting Student Learners	5.23	2.01
G-4. Supervising Student Teachers	5.18	0.53
J-4. Complying With Government Employment Regulations	5.15	1.03
J-3. Developing a Training Plan and Agreement	5.12	2.77*
E-5. Involving Other Persons and Agencies in Assisting Students	5.12	2.43*
J-5. Supervising Student Learner's On-The-Job Experience	5.09	6.41*
A-1. Utilizing Traditional Educational Technology	5.06	0.57
I-1. Planning, Conducting, and Utilizing a Community Survey	5.02	0.81
E-1. Obtaining Background Information on Students	4.87	1.89
A-4. Employing Group Interaction Techniques	4.82	2.70*
F-2. Advising a Student Occupational Organization	4.65	2.39*
F-1. Establishing a Student Occupational Organization	4.45	2.19
F-3. Participation in State and National Student Occupational Organization Activities	4.42	1.22
A-2. Utilizing Innovative Educational Technology	4.05	2.22

*Significant at the .05 level if the F Value equals or exceeds 2.28.

Business Teachers

Of the fifteen clusters on which there is significant disagreement between service area occupational teacher groups regarding level of inservice need, business teachers place one of the clusters in the upper quartile of weighted inservice need indicators and five in the lower quartile. The weighted overall inservice need indicator for occupational teachers is higher than the business teacher inservice need indicator on eight of the clusters and the business teacher's inservice need indicator is higher on seven. See Table LXXXVIII for business teacher's inservice needs.

TABLE LXXXVIII. CLUSTER LEVEL INSERVICE NEEDS FOR OCCUPATIONAL TEACHERS IN THE SERVICE AREA OF BUSINESS

Cluster Number and Title	Inservice Need Indicator Value	F Value
B-6. Establishing Acceptable Student Behavior	7.02	1.23
G-1. Upholding the Philosophy and Goals of the Profession	6.76	1.86
C-5. Maintaining Good Intra-School Relationships	6.75	1.26
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	6.62	0.75
B-1. Projecting Instructional Resource Needs	6.53	2.13
G-3. Advancing One's Professional Competencies	6.52	1.22
B-7. Managing the Laboratory	6.52	1.85
D-3. Selecting Instructional Resources	6.51	1.60
A-9. Directing Laboratory Instruction	6.48	0.83
A-5. Employing Teacher-Centered Methods of Presentation	6.47	1.13
B-5. Assuring Laboratory Safety	6.40	2.40*
H-1. Evaluating Student Performance	6.37	0.15
A-6. Applying Basic Instructional Strategies	6.30	1.97
D-1. Structuring/Designing a Course	6.23	1.34

TABLE LXXXVIII. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
E-2. Promoting Constructive Teacher-Student Relationships	6.17	1.92
I-4. Planning the Occupational Program	6.17	0.83
B-4. Maintaining Records and Files	6.10	0.52
A-10. Directing Independent Study	6.09	2.37*
D-2. Planning a Lesson	6.09	7.00*
A-3. Utilizing Visual Aids	6.06	0.63
E-4. Involving Guidance Counselors in Assisting Students	5.92	2.17
I-6. Evaluating the Occupational Program	5.91	1.50
H-5. Evaluating Quality of Instruction	5.88	0.36
B-3. Procuring Supplies and Facilities	5.82	4.88*
C-3. Maintaining Good School-Community Relations	5.77	1.08
G-2. Contributing Professional Service	5.75	0.27
B-2. Preparing an Annual Budget	5.72	3.55*
A-8. Directing Instruction by Students	5.70	0.77
A-7. Utilizing Community Resources	5.63	3.71*
H-3. Formulating Test and Rating Sheets	5.57	1.54
H-4. Administering and Analyzing Tests	5.57	0.86
D-4. Developing Instructional Materials	5.56	2.15
C-1. Planning School-Community Relations Activities	5.56	2.32*
J-2. Selecting Training Stations	5.52	1.93
E-2. Counseling Students	5.50	2.69*
I-5. Preparing a Long-Range Occupational Program	5.49	0.37
E-5. Involving Other Persons and Agencies in Assisting Students	5.48	2.43*
C-4. Obtaining School-Community Feedback on the Occupational Program	5.46	1.78
I-2. Organizing an Advisory Committee	5.42	1.64
H-2. Involving Students in Evaluation	5.37	1.19
C-2. Publicizing Occupational Education and the School's Occupational Program	5.37	1.99
J-6. Evaluating the Student Learner's On-The-Job Performance	5.36	5.50*
I-3. Maintaining and Utilizing an Advisory Committee	5.29	0.95
J-7. Improving Related and On-The-Job Instruction	5.28	4.57*
J-5. Supervising Student Learner's On-The-Job Experience	5.24	6.41*
J-1. Selecting Student Learners	5.23	2.01

TABLE LXXXVIII. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
J-3. Developing a Training Plan and Agreement	5.23	2.77*
G-4. Supervising Student Teachers	5.18	0.53
A-4. Employing Group Interaction Techniques	5.18	2.70*
J-7. Complying with Government Employment Regulations	5.15	1.08
A-1. Utilizing Traditional Educational Technology	5.06	0.57
I-1. Planning, Conducting, and Utilizing a Community Survey	5.02	0.81
E-1. Obtaining Background Information on Students	4.87	1.89
F-2. Advising a Student Occupational Organization	4.48	2.39*
F-1. Establishing a Student Occupational Organization	4.45	2.19
F-3. Participating in State and National Student Occupational Organization Activities	4.42	1.22
A-2. Utilizing Innovative Educational Technology	4.05	2.22

*Significant at the .05 level if the F Value equals or exceeds 2.28.

Distributive Education Teachers

Of the fifteen clusters on which there is significant disagreement between service area occupational teacher groups regarding level of inservice need, distributive education teachers place five of the clusters in the upper quartile of weighted inservice need indicators and two in the lower quartile. The weighted overall inservice need indicator for occupational teachers is higher than the distributive education teachers inservice need indicator on four of the clusters and the distributive education teacher's inservice need indicator is higher on eleven. See Table LXXXIX for distributive education teacher's inservice needs.

TABLE LXXXIX. CLUSTER LEVEL INSERVICE NEEDS FOR OCCUPATIONAL TEACHERS IN THE SERVICE AREA OF DISTRIBUTIVE EDUCATION

Cluster Number and Title	Inservice Need Indicator Value	F Value
B-6. Establishing Acceptable Student Behavior	7.02	1.23
G-1. Upholding the Philosophy and Goals of the Profession	6.76	1.86
C-5. Maintaining Good Intra-School Relationships	6.75	1.26
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	6.62	0.75
B-1. Projecting Instructional Resource Needs	6.53	2.13
G-3. Advancing One's Professional Competencies	6.52	1.22
B-7. Managing the Laboratory	6.52	1.85
B-3. Procuring Supplies and Facilities	6.52	4.88*
D-3. Selecting Instructional Resources	6.51	1.60
J-3. Developing a Training Plan and Agreement	6.48	2.77*
A-9. Directing Laboratory Instruction	6.48	0.83
A-5. Employing Teacher-Centered Methods of Presentation	6.47	1.13
J-6. Evaluating the Student Learners On-The-Job Performance	6.42	5.50*
H-1. Evaluating Student Performance	6.37	0.15
A-6. Applying Basic Instructional Strategies	6.30	1.97
B-2. Preparing an Annual Budget	6.27	3.55*
A-7. Utilizing Community Resources	6.27	3.71*
D-1. Structuring/Designing a Course	6.23	1.34
E-2. Promoting Constructive Teacher-Student Relationships	6.17	1.92
I-4. Planning the Occupational Program	6.17	0.83
B-4. Maintaining Records and Files	6.10	0.52
D-2. Planning a Lesson	6.10	7.00*
A-3. Utilizing Visual Aids	6.06	0.63
B-5. Assuring Laboratory Safety	6.00	2.40*
J-7. Improving Related and On-The-Job Instruction	6.00	4.57*

TABLE LXXXIX. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
J-5. Supervising Student Learner's On-The-Job Experience	5.99	6.41*
A-4. Employing Group Interaction Techniques	5.96	2.70*
E-4. Involving Guidance Counselors in Assisting Students	5.92	2.17
I-6. Evaluating the Occupational Program	5.91	1.50
E-2. Counseling Students	5.90	2.69*
H-5. Evaluating Quality of Instruction	5.88	0.36
C-1. Planning School-Community Relations Activities	5.83	2.32*
C-3. Maintaining Good School-Community Relations	5.77	1.08
G-2. Contributing Professional Service	5.75	0.27
A-8. Directing Instruction by Students	5.70	0.77
H-3. Formulating Test and Rating Sheets	5.57	1.54
H-4. Administering and Analyzing Tests	5.57	0.86
D-4. Developing Instructional Materials	5.56	2.15
J-2. Selecting Training Stations	5.52	1.93
I-5. Preparing a Long-Range Occupational Program	5.49	0.37
C-4. Obtaining School-Community Feedback on the Occupational Program	5.46	1.78
I-2. Organizing an Advisory Committee	5.42	1.64
F-2. Advising a Student Occupational Organization	5.41	2.39*
H-2. Involving Students in Evaluation	5.37	1.19
C-2. Publicizing Occupational Education and the School's Occupational Program	5.37	1.99
I-3. Maintaining and Utilizing an Advisory Committee	5.29	0.95
J-1. Selecting Student Learners	5.23	2.01
G-4. Supervising Student Teachers	5.18	0.53
J-4. Complying With Government Employment Regulations	5.15	1.03
A-1. Utilizing Traditional Educational Technology	5.06	0.57
I-1. Planning, Conducting, and Utilizing a Community Survey	5.02	0.81
E-5. Involving Other Persons and Agencies in Assisting Students	4.98	2.43*
A-10. Directing Independent Study	4.96	2.37*
E-1. Obtaining Background Information on Students	4.87	1.89

TABLE LXXXIX. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
F-1. Establishing a Student Occupational Organization	4.45	2.19
F-3. Participation in State and National Student Occupational Organization Activities	4.42	1.22
A-2. Utilizing Innovative Educational Technology	4.05	2.22

*Significant at the .05 level if the F Value equals or exceeds 2.28.

Health Teachers

Of the fifteen clusters on which there is significant disagreement between service area occupational teacher groups regarding level of inservice need, health teachers place five of the clusters in the upper quartile of weighted inservice need indicators and five in the lower quartile. The weighted overall inservice need indicator for occupational teachers is higher than the health teachers inservice need indicator on five of the clusters and the health teacher's inservice need indicator is higher on ten. See Table LXXXX for health teacher's inservice needs.

TABLE LXXXX. CLUSTER LEVEL INSERVICE NEEDS FOR OCCUPATIONAL TEACHERS IN THE SERVICE AREA OF HEALTH

Cluster Number and Title	Inservice Need Indicator Value	F Value
J-6. Evaluating the Student Learners On-The Job Performance	7.11	5.50*
B-6. Establishing Acceptable Student Behavior	7.02	1.23
G-1. Upholding the Philosophy and Goals of the Professions	6.76	1.86
C-5. Maintaining Good Intra-School Relationships	6.75	1.26
B-5. Assuring Laboratory Safety	6.73	2.40*
J-7. Improving Related and On-The-Job Instruction	6.71	4.57*
J-5. Supervising Student Learner's On-The-Job Experience	6.69	6.41*
D-2. Planning a Lesson	6.64	7.00*
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	6.62	0.75
B-1. Projecting Instructional Resource Needs	6.53	2.13
G-3. Advancing One's Professional Competencies	6.52	1.22
B-7. Managing the Laboratory	6.52	1.85
D-3. Selecting Instructional Resources	6.51	1.60
A-9. Directing Laboratory Instruction	6.48	0.83
A-5. Employing Teacher-Centered Methods of Presentation	6.47	1.13
H-1. Evaluating Student Performance	6.37	0.15
A-6. Applying Basic Instructional Strategies	6.30	1.97
D-1. Structuring/Designing a Course	6.23	1.34
E-2. Promoting Constructive Teacher-Student Relationships	6.17	1.92
I-4. Planning the Occupational Program	6.17	0.83
B-4. Maintaining Records and Files	6.10	0.52
E-2. Counseling Students	6.09	2.69*
A-3. Utilizing Visual Aids	6.06	0.63
E-4. Involving Guidance Counselors in Assisting Students	5.92	2.17
I-6. Evaluating the Occupational Program	5.91	1.50
J-3. Developing a Training Plan and Agreement	5.89	2.77*
H-5. Evaluating Quality of Instruction	5.88	0.36
A-7. Utilizing Community Resources	5.88	3.71*
C-3. Maintaining Good School-Community Relations	5.77	1.08
G-2. Contributing Professional Service	5.75	0.27
A-8. Directing Instruction by Students	5.70	0.77

TABLE LXXXX. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
A-10. Directing Independent Study	5.58	2.37*
H-3. Formulating Test and Rating Sheets	5.57	1.54
H-4. Administering and Analyzing Tests	5.57	0.86
D-4. Developing Instructional Materials	5.56	2.15
J-2. Selecting Training Stations	5.52	1.93
I-5. Preparing a Long-Range Occupational Program	5.49	0.37
C-4. Obtaining School-Community Feedback on the Occupational Program	5.46	1.78
A-4. Employing Group Interaction Techniques	5.43	2.70*
I-2. Organizing an Advisory Committee	5.42	1.64
H-2. Involving Students in Evaluation	5.37	1.19
C-2. Publicizing Occupational Education and the School's Occupational Program	5.37	1.99
I-3. Maintaining and Utilizing an Advisory Committee	5.29	0.95
C-1. Planning School-Community Relations Activities	5.27	2.32*
J-1. Selecting Student Learners	5.23	2.01
G-4. Supervising Student Teachers	5.18	0.53
J-4. Complying With Government Employment Regulations	5.15	1.08
E-5. Involving Other Persons and Agencies in Assisting Students	5.14	2.43*
A-1. Utilizing Traditional Educational Technology	5.06	0.57
I-1. Planning, Conducting, and Utilizing a Community Survey	5.02	0.81
B-3. Procuring Supplies and Facilities	4.91	4.88*
E-1. Obtaining Background Information on Students	4.87	1.89
B-2. Preparing an Annual Budget	4.82	3.55*
F-1. Establishing a Student Occupational Organization	4.45	2.19
F-3. Participating in State and National Student Occupational Organization Activities	4.42	1.22
F-2. Advising a Student Occupational Organization	4.14	2.39*
A-2. Utilizing Innovative Educational Technology	4.05	2.22

*Significant at the .05 level if the F Value equals or exceeds 2.28.

Home Economics Teachers

Of the fifteen clusters on which there is significant disagreement between service area occupational teacher groups regarding level of inservice need, home economics teachers place four of the clusters in the upper quartile of weighted inservice need indicators and three in the lower quartile. The weighted overall inservice need indicator for occupational teachers is higher than the home economics teachers inservice need indicator on six of the clusters and the home economics teacher's inservice need indicator is higher on nine. See Table LXXXXI for home economics teacher's inservice needs.

TABLE LXXXXI. CLUSTER LEVEL INSERVICE NEEDS FOR OCCUPATIONAL TEACHERS IN THE SERVICE AREA OF HOME ECONOMICS

Cluster Number and Title	Inservice Need Indicator Value	F Value
B-6. Establishing Acceptable Student Behavior	7.02	1.23
G-1. Upholding the Philosophy and Goals of the Profession	6.76	1.86
C-5. Maintaining Good Intra-School Relationships	6.75	1.26
D-2. Planning a Lesson	6.68	7.00*
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	6.62	0.75
B-1. Projecting Instructional Resource Needs	6.53	2.13
G-3. Advancing One's Professional Competencies	6.52	1.22
B-7. Managing the Laboratory	6.52	1.85
D-3. Selecting Instructional Resources	6.51	1.60
A-9. Directing Laboratory Instruction	6.48	0.83
A-5. Employing Teacher-Centered Methods of Presentation	6.47	1.13
A-7. Utilizing Community Resources	6.41	3.71*
E-2. Counseling Students	6.40	2.69*

TABLE LXXXXI. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
H-1. Evaluating Student Performance	6.37	0.15
A-6. Applying Basic Instructional Strategies	6.30	1.97
J-6. Evaluating the Student Learners On-The-Job Performance	6.26	5.50*
D-1. Structuring/Designing a Course	6.23	1.34
B-5. Assuring Laboratory Safety	6.17	2.40*
E-2. Promoting Constructive Teacher-Student Relationships	6.17	1.92
I-4. Planning the Occupational Program	6.17	0.83
B-4. Maintaining Records and Files	6.10	0.52
A-3. Utilizing Visual Aids	6.06	0.63
A-4. Employing Group Interaction Techniques	5.97	2.70*
C-1. Planning School-Community Relations Activities	5.92	2.32*
E-4. Involving Guidance Counselors in Assisting Students	5.92	2.17
E-5. Involving Other Persons and Agencies in Assisting Students	5.92	2.43
I-6. Evaluating the Occupational Program	5.91	1.50
J-7. Improving Related and On-The-Job Instruction	5.89	4.57*
H-5. Evaluating Quality of Instruction	5.88	0.36
J-5. Supervising Student Learner's On-The-Job Experience	5.88	6.41*
B-2. Preparing an Annual Budget	5.83	3.55*
C-3. Maintaining Good School-Community Relations	5.77	1.08
G-2. Contributing Professional Service	5.75	0.27
A-8. Directing Instruction by Students	5.70	0.77
H-3. Formulating Test and Rating Sheets	5.57	1.54
H-4. Administering and Analyzing Tests	5.57	0.86
D-4. Developing Instructional Materials	5.56	2.15
J-2. Selecting Training Stations	5.52	1.93
I-5. Preparing a Long-Range Occupational Program	5.49	0.37
B-3. Procuring Supplies and Facilities	5.47	4.88*
C-4. Obtaining School-Community Feedback on the Occupational Program	5.46	1.78
I-2. Organizing an Advisory Committee	5.42	1.64
H-2. Involving Students in Evaluation	5.37	1.19
C-2. Publicizing Occupational Education and the School's Occupational Program	5.37	1.99

TABLE LXXXXI. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
I-3. Maintaining and Utilizing an Advisory Committee	5.29	0.95
J-1. Selecting Student Learners	5.23	2.01
G-4. Supervising Student Teachers	5.18	0.53
J-4. Complying With Government Employment Regulations	5.15	1.08
A-10. Directing Independent Study	5.07	2.37*
A-1. Utilizing Traditional Educational Technology	5.06	0.57
I-1. Planning, Conducting, and Utilizing a Community Survey	5.02	0.81
J-3. Developing a Training Plan and Agreement	5.02	2.77*
E-1. Obtaining Background Information on Students	4.87	1.89
F-1. Establishing a Student Occupational Organization	4.45	2.19
F-3. Participation in State and National Student Occupational Organization Activities	4.42	1.22
F-2. Advising a Student Occupational Organization	3.62	2.39*

*Significant at the .05 level if the F Value equals or exceeds 2.28.

Trade and Industrial Teachers

Of the fifteen clusters on which there is significant disagreement between service area occupational teacher groups regarding level of inservice need, trade and industrial teachers place one of the clusters in the upper quartile of weighted inservice need indicators and five in the lower quartile. The weighted overall inservice need indicator for occupational teachers is higher than the trade and industrial teachers inservice need indicator on ten of the clusters and the trade and industrial teacher's inservice need indicator is higher on five. See Table LXXXXII for trade and industrial teacher's inservice needs.

TABLE LXXXXII. CLUSTER LEVEL INSERVICE NEEDS FOR OCCUPATIONAL TEACHERS IN THE SERVICE AREA OF TRADE AND INDUSTRY

Cluster Number and Title	Inservice Need Indicator Value	F Value
B-6. Establishing Acceptable Student Behavior	7.02	1.23
B-5. Assuring Laboratory Safety	6.97	2.40*
G-1. Upholding the Philosophy and Goals of the Profession	6.76	1.86
C-5. Maintaining Good Intra-School Relationships	6.75	1.26
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	6.62	0.75
B-1. Projecting Instructional Resource Needs	6.53	2.13
G-3. Advancing One's Professional Competencies	6.52	1.22
B-7. Managing the Laboratory	6.52	1.85
D-3. Selecting Instructional Resources	6.51	1.60
A-9. Directing Laboratory Instruction	6.48	0.83
A-5. Employing Teacher-Centered Methods of Presentation	6.47	1.13
H-1. Evaluating Student Performance	6.37	0.15
A-6. Applying Basic Instructional Strategies	6.30	1.97
D-1. Structuring/Designing a Course	6.23	1.34
E-2. Promoting Constructive Teacher-Student Relationships	6.17	1.92
I-4. Planning the Occupational Program	6.17	0.83
B-4. Maintaining Records and Files	6.10	0.52
A-3. Utilizing Visual Aids	6.06	0.63
D-2. Planning a Lesson	6.03	7.00*
B-3. Securing Supplies and Facilities	6.01	4.88*
B-2. Preparing an Annual Budget	5.96	3.55*
J-7. Improving Related and On-The-Job Instruction	5.95	4.57*
E-4. Involving Guidance Counselors in Assisting Students	5.92	2.17
I-6. Evaluating the Occupational Program	5.91	1.50

TABLE LXXXXII. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
J-6. Evaluating the Student Learners On-The-Job Performance	5.90	5.50*
H-5. Evaluating Quality of Instruction	5.88	0.36
C-3. Maintaining Good School-Community Relations	5.77	1.08
G-2. Contributing Professional Service	5.75	0.27
E-2. Counseling Students	5.73	2.69*
A-8. Directing Instruction by Students	5.70	0.77
J-3. Developing a Training Plan and Agreement	5.62	2.77*
H-3. Formulating Test and Rating Sheets	5.57	1.54
H-4. Administering and Analyzing Tests	5.57	0.86
D-4. Developing Instructional Materials	5.56	2.15
J-2. Selecting Training Stations	5.52	1.93
I-5. Preparing a Long-Range Occupational Program	5.49	0.37
C-4. Obtaining School-Community Feedback on the Occupational Program	5.46	1.78
J-5. Supervising Student Learner's On-The-Job Experience	5.46	6.41*
A-10. Directing Independent Study	5.33	2.37*
I-3. Maintaining and Utilizing an Advisory Committee	5.29	0.95
J-1. Selecting Student Learners	5.23	2.01
G-4. Supervising Student Teachers	5.18	0.53
J-4. Complying With Government Employment Regulations	5.15	1.08
A-7. Utilizing Community Resources	5.14	3.71*
A-1. Utilizing Traditional Educational Technology	5.06	0.57
I-1. Planning, Conducting, and Utilizing a Community Survey	5.02	0.81
A-4. Employing Group Interaction Techniques	5.02	2.70*
E-5. Involving Other Persons and Agencies in Assisting Students	4.88	2.43*
E-1. Obtaining Background Information on Students	4.87	1.89
C-1. Planning School-Community Relations Activities	4.80	2.32*
F-1. Establishing a Student Occupational Organization	4.45	2.19
F-3. Participation in State and National Student Occupational Organization Activities	4.42	1.22

TABLE LXXXXII. CONTINUED

Cluster Number and Title	Inservice Need Indicator Value	F Value
F-2. Advising a Student Occupational Organization	4.12	2.39*
A-2. Utilizing Innovative Educational Technology	4.05	2.22

*Significant at the .05 level if the F Value equals or exceeds 2.28.

Correlation of Occupational Teacher-Supervisor Ratings

The cluster level correlation values ranged from +.77 to -.65. Nine of the ten category correlation values for importance, performance, and inservice need had both negative and positive cluster level teacher-supervisor ranking correlations. The three clusters comprising the student occupational organization category have only positive teacher-supervisor correlations for importance, performance, and inservice need.

Twenty cluster level correlation values are statistically significant at the .05 level of significance. Only one category, student occupational organizations, has correlation values large enough to be statistically significant. See Table LXXXXIII for a complete category level listing of correlation values for importance, performance, and inservice need.

TABLE LXXXXIII. CATEGORY LEVEL CORRELATION OF OCCUPATIONAL TEACHER-SUPERVISOR RATINGS ON IMPORTANCE, PERFORMANCE, AND INSERVICE NEED

Category Letter and Title		Importance Correlation			Performance Correlation			Inservice Need C.		
		Pos.	Neg.	Av.	Pos.	Neg.	Av.	Pos.	Neg.	Av.
A. Executing (Implementing) Instruction	(10)	+.13(3)	-.19(7)	-.10	+.27(6)	-.13(4)	-.11	+.18(8)	-.27(2)	+.09
B. Management	(7)	+.33(3)	-.27(4)	-.01	+.19(3)	-.18(4)	-.02	+.28(3)	-.25(4)	-.02
C. School-Community Relations	(5)	+.24(4)	-.15(1)	+.16	+.20(3)	-.07(2)	+.09	+.25(3)	-.08(2)	+.12
D. Planning Instruction	(4)	+.47(3)	-.12(1)	+.32	+.33(3)	-.14(1)	+.21	+.43(3)	-.05(1)	+.31
E. Guidance	(6)	+.30(3)	-.19(3)	+.06	-.19(3)	-.08(2)	+.07	+.20(5)	-.02(1)	+.16
F. Student Occupational Organizations	(3)	+.43(3)		+.43	+.56(3)		+.56	+.56(3)		+.56
G. Professional Role and Development	(4)	+.15(3)	-.20(1)	+.06	-.36(2)	-.10(2)	+.13	+.49(3)	-.23(1)	+.31
H. Evaluating Instruction	(5)	+.16(1)	-.37(4)	-.26	+.25(2)	-.23(3)	-.04	+.13(1)	-.31(4)	-.22
I. Program Planning, Development, and Evaluation	(6)	+.24(3)	-.40(3)	-.08	+.41(5)	-.11(1)	+.33	+.29(4)	-.26(2)	+.11
J. Coordination	(7)	+.27(4)	-.13(3)	+.10	+.43(3)	-.16(4)	+.09	+.36(6)	-.32(1)	+.26

Conclusions

The following conclusions were drawn from this study:

1. Occupational teachers perceive some professional competencies (performance elements) as being very important in their successfully fulfilling the responsibilities of their professional role while other professional competencies are perceived as unimportant (Tables XXII-LXXVIII).
2. There is substantial overlap in the importance attached to professional competencies (performance elements and clusters) by occupational teachers in the six service area teacher groups; there was no significant difference in the importance level attached to 281 of 365 performance elements tested (.05 level of significance). There was also no significant difference in the importance occupational teachers in the six service area teacher groups attached to 38 of the 57 clusters (Appendix G).
3. Occupational teachers in the six service area teacher groups perceive their performance at similar levels; there was no significant difference in performance level across service area teacher groups on 49 of the 57 clusters (.05 level of significance) (Appendix G).
4. The level of teacher-supervisor agreement fluctuates widely between clusters ranging from +.77 to -.65

correlation. The only consistent significant agreement was in the student occupational organization category (Table LXXXIII).

5. There is little difference in the perceived inservice needs of occupational teachers in New York State (Tables LXXXV and LXXXVI).
6. Professional education inservice programs are urgently needed in specified clusters. Occupational teachers rated 26 of 57 clusters at 3.00 or higher on a 1.00 (low)-4.00 (high) importance scale. They also rated their performance level on 16 clusters at below 3.00 on a 4.00 (low)-1.00 (high) performance scale. Twenty-six clusters were perceived to be well above average in importance while performance on 16 clusters was perceived to be well below average (Appendix G).
7. The performance elements included in this research instrument represent a reasonably inclusive list of occupational teacher professional behavior (Table H).

Recommendations

The following recommendations for action and additional research are based on observations during the conduct of the study and on data collected:

1. Occupational teachers perception of their inservice need should be strongly considered

when planning professional education inservice programs. When occupational teachers perceptions are in conflict with state department of education policy, the reason(s) for the conflict should be isolated and resolved.

2. The occupational education bureaus in the New York State Education Department should use inservice stipends, tuition waivers, etc. to promote occupational teacher attendance at those professional education programs occupational teachers identified as being in greatest need.
3. Additional research is needed to identify lines of effective communication between occupational teachers and those persons/agencies charged with responsibility for developing inservice programs.
4. The data should be further analyzed to determine:
    - (a) effect of student teaching on perceived inservice need. Fifty-one percent of the respondents have completed a college supervised student teaching experience while forty-six percent have not.
    - (b) effect of related occupational experience on perceived inservice need. Fifty percent of the respondents reported over 10 years related work experience while fifty percent

reported less than ten years, six percent having no related work experience.

(c) effect of formal education and professional education on perceived inservice need. Fifty-nine percent of the respondents have at least a bachelors degree while forty-one percent have less. Sixty-five percent of the respondents have completed over 18 semester hours of professional education (exclusive of student teaching) while thirty-five percent have completed less.

(d) effect of certification level on perceived inservice need. Fifty percent of the respondents held permanent certification while fifty percent held provisional or default certification.

(e) the variance of professional education inservice need between specialization occupational teacher groups within service area teacher groups.

(f) the effect of length and number of supervisory visits per academic year on teacher-supervisor inservice need agreement level.

5. The methodology used in this study to identify the professional inservice needs of occupational teachers could and should be used to identify

occupational teacher's technical inservice needs.

6. Additional research is needed to more positively establish the relationship between professional inservice education and increased teacher competence and performance.
7. The results of this study should be discussed at professional meetings with directors of occupational education in BOCES occupational centers and vocation high schools, occupational teacher educators, and occupational supervisors at the local and state level.

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APPENDIX A

CORRESPONDENCE WITH OCCUPATIONAL EDUCATORS AND SUPERVISORS

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N.Y. 14850

August 17, 1972

Bureau of Occupational
  Inservice Education
State Department of Education
721 Capital Mall
Sacramento, CA 95814

Dear Sir:

We in the Agricultural and Occupational Education Division of the Department of Education at Cornell are evaluating and attempting to upgrade our ability to ascertain the inservice education needs of occupational teachers in New York. Before revising any of our current methods of determining teacher need, we desire to learn methods other states are using.

Will you please answer the following five questions and return the survey form in the attached prepaid envelope? Any materials that you can provide that will further explain your inservice education program will be most helpful.

Thank you in advance for your assistance.

Sincerely,

W. E. Drake, Chairman
Agricultural and Occupational
  Education

kl

Atch: Survey form
      Envelope

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University
Department of Education
Stone Hall
Ithaca, N.Y. 14850

July 19, 1972

Professor Ruth Hughes
Home Economics Teacher Education
College of Home Economics
Iowa State University
Ames, IA 50010

Dear Professor Hughes:

We in the Agricultural and Occupational Education Division of the Department of Education at Cornell are evaluating and attempting to upgrade our ability to ascertain the inservice education needs of occupational teachers in New York. Before revising any of our current methods of determining teacher need, we desire to learn what methods our collegues in other states are using.

Will you please answer the following 5 questions and return the survey form in the attached prepaid envelope? Any materials that you can provide that will further explain your inservice education program will be most helpful.

Thank you in advance for your assistance

Sincerely,

W. E. Drake, Chairman
Agricultural and Occupational
Education

kl

Atch: Survey form
Envelope

State:______________________________

Respondent's Name____________________

Position____________________

Return to:

W. E. Drake, Chairman
Agric. & Occupational
Education Division
Cornell University
Ithaca, New York 14850

1. What is the state education department's role in determining then providing inservice education for occupational teachers?

2. How does the state education department determine inservice education needs of occupational teachers?

3. Are tuition waivers, grants, etc. available for use in encouraging occupational teachers to attend inservice courses or programs? If yes, please explain the source of this support and method of administration.

4. Are individual occupational teachers involved in identifying inservice requirements? How?

5. Is the state level professional association for each of the occupational fields formally involved in determining inservice needs? How?

Other comments:

Institution:___________________________

Respondent's Name:____________________

Position:___________________________

Return to:

Bill Drake, Chairman
Agric. & Occupational
Education Division
204 Stone Hall
Cornell University
Ithaca, New York 14850

1. How does your institution determine the inservice needs of Home Economics teachers? We are especially interested in methods you use to determine professional education inservice needs.

2. Are individual Home Economics Teachers involved in identifying inservice requirements? How?

3. Are tuition waivers, grants, etc. available for use in encouraging Home Economics Teachers to attend inservice courses or programs? If yes, please explain the source of this support and method of administration.

4. Is the state level professional association for Home Economics Teachers formally involved in determining inservice needs? How?

5. What is the role of your state education department in determining inservice needs of Home Economics Teachers?

Other Comments:

STATE EDUCATION DEPARTMENT RESPONDENTS

(Inservice Education Bureau)

Alabama
California
Colorado
Iowa
Missouri
North Carolina
Ohio
Texas
Virginia

OCCUPATIONAL TEACHER EDUCATION INSTITUTION RESPONDENTS

Agriculture

California State Polytechnic College
Michigan State University
North Carolina Agricultural and Technical State University
Ohio State University
Pennsylvania State University
Texas A & M
U. of Florida
U. of Missouri
U. of Nebraska
Virginia Polytechnic Institute and State University
Washington State University

Business

Colorado State University
East Texas State University
Radford College
Rutgers University
University of Arkansas

Distributive Education

Arizona State University
Oregon State University
State University of New York (Albany)
University of Georgia
University of Kentucky
University of Northern Colorado

Home Economics

Iowa State University
Mankota State College
University of Delaware
West Virginia University

Trade and Industrial

Florida State University
Purdue University
University of Arkansas
University of Maryland
University of Nevada

APPENDIX B

CORRESPONDENCE WITH PARTICIPANTS AND RESPONDENTS

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N.Y. 14850

December 12, 1972

Mr. Frank J. Wolff
Assistant Superintendent
Nassau County BOCES
125 Jericho Turnpike
Jericho, NY 11753

Dear Mr. Wolff:

The Cornell Institute for Research and Development in Occupational Education is sponsoring a study entitled "Performance Oriented Professional Education Inservice Needs of Secondary Level Occupational Teachers in New York State. The principal investigator for this study is Professor William E. Drake of the Division of Agricultural and Occupational Education; assisted by Ron H. Ely, Graduate Research Assistant.

The project is concerned with the identification of vital curricular elements which will expedite the inservice professional training of occupational teachers, rating the importance of the identified curricular elements, and rating the performance level of teachers via the identified curricular elements. The result will be a proposed inservice program based on identified teacher need which gives inservice educators the capability to develop new programs to meet identified need plus the capability to eliminate some of the duplication and inefficiency of existing programs. The study will have a spin-off benefit of testing teacher perceptions of performance elements and clusters that might be included in preservice programs under revision to meet new certification requirements.

We desire your permission to contact via questionnaire approximately 20% of the occupational teachers at your school(s). We also need the cooperation of the supervisor of these teachers in completing a questionnaire. The amount of time required to complete either of the questionnaires will be less than one hour. Responses from individual teachers and the supervisor will be kept strictly confidential. While no individual responses will be identified, receipt of useful data from all schools in the statewide sample is very important if the results of the study are to be valid.

Please return the enclosed letter indicating whether or not your institution will be participating in this study. (A self-addressed stamped envelope is enclosed for your convenience. Please return the letter by 1 January as we hope to begin distribution of the questionnaires soon after the first of the year.) We also ask that you indicate on the letter the name of the administrator who most directly supervises the occupational teachers at the school(s) indicated so we can mail his/her questionnaire directly. We welcome collect phone calls [(607) 256-2197] if you need additional information.

Thank you in advance for your consideration and the cooperation you provide in helping us complete this statewide study designed to improve inservice education for occupational teachers.

Sincerely yours,

Dr. John Wilcox, Director
Institute for Occupational
Education

Professor William E. Drake
Principal Investigator

Ron H. Ely
Research Assistant

Enclosures

ACKNOWLEDGMENT LETTER

Name of Respondent ______________________________

☐ We will participate in the "Performance Oriented Professional Education Inservice Needs..." Project.

☐ Other ______________________________

Please correct the school address(es) and list the name of the supervisor in each school who is most knowledgeable of the occupational teachers' professional competence.

School Name and Address	Supervisors Name --- Title
(1)	(1) ____________________
(2)	(2) ____________________
(3)	(3) ____________________
(4)	(4) ____________________
(5)	(5) ____________________

Please return to the following address NLT 1 January 1973:

William E. Drake, Chairman
Agricultural and Occupational Education
204 Stone Hall
Cornell University
Ithaca, New York 14850

THANK YOU FOR YOUR COOPERATION

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University
Department of Education
Stone Hall
Ithaca, N.Y. 14850

To: Occupational Supervisors in New York State

Subject: Research Project Entitled "Performance Oriented Professional Education Needs of Secondary Level Occupational Teachers in New York State"

Date: 16 February 1973

Earlier this year, we secured permission from the administration of your school to contact some of your occupational teachers relative to their participating in a study sponsored by the Cornell Institute for Research and Development in Occupational Education. Of the statewide sample of occupational teachers we invited to participate in the study,   are from your school. We are now requesting that you participate in the study in your role as the supervisor of one of them,

The principle focus of the study is the identification of vital curricular elements that can be used to improve the inservice professional training of occupational teachers. The result of the research will be a proposed inservice program which will have the capability to eliminate any duplication and inefficiency in existing programs. The study will have the spin-off benefit of testing teacher and supervisor perception of pedagogical performance elements and clusters that might be included in emerging preservice programs.

Our field tests indicate it will take you approximately 35 minutes to complete the instrument. Your response will be kept in strict confidence; in no case will anyone be able to ascertain your assessment of this teacher's performance. Neither the teacher's name or your name is listed on the data sheet and the computer code is used only to facilitate our analysis of data. Since we are asking only a small number of supervisors to complete the instrument, receipt of data from each of you is very important to the successful conclusion of the study.

Please complete and return the enclosed instrument in the self-addressed stamped manila envelope. We are aware of your many professional commitments but request that the instrument be returned by March 1st. Directions for completing the instrument are attached.

Your cooperation and assistance in helping us complete this statewide study designed to improve inservice education for occupational teachers will be greatly appreciated.

Sincerely yours,

John Wilcox
Dr. John Wilcox, Director
Institute for Occupational Education

William E. Drake
Professor William E. Drake
Principal Investigator

Atch: Directions
Research Instrument
Prepaid Return Envelope

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N. Y. 14850

7 March 1973

Mr.
Director, Vocational Education
Area Occupational Center
555 Warren Road
Ithaca, New York

Dear :

Approximately two weeks ago you were sent a research instrument designed to obtain your assessment of: (1) the teaching performance of (name of assigned teacher) via identified teaching clusters, and (2) the importance of identified performance elements to the success of an occupational teacher in (his/her) specialization. The receipt of your completed instrument is extremely important to the successful completion of the project since only a small number of occupational supervisors was asked to participate. Won't you take approximately 30 minutes from your busy schedule to give us your response?

The success of this project, as is always the case, is dependent on the good will and cooperation of occupational educators. We feel the objectives are worthwhile and that the results will be most beneficial to teacher educators as they plan inservice programs to meet occupational teacher's needs.

If you have already returned the instrument, please disregard this letter and accept our thanks for your cooperation.

Sincerely yours,

Dr. John Wilcox, Director
Institute for Occupational Education

Professor William E. Drake
Principal Investigator

NOTE: If the research instrument and instructions have been inadvertently misplaced, please let us know and we'll immediately forward a duplicate copy.

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N.Y. 14850

16 February 1973

Dear Occupational Educator:

The Cornell Institute for Research and Development in Occupational Education is sponsoring a study entitled "Performance Oriented Professional Education Inservice Needs of Secondary Level Occupational Teachers in New York State". A sample of occupational teachers from throughout the state has been selected to participate in the study; you were one of the teachers selected and we are now requesting that you participate by completing the enclosed instrument.

The principle focus of the study is the identification of vital curricular elements that can be used to improve the inservice professional training of occupational teachers. Maximum teacher input is sought in determining what is important/not important to an occupational teacher's performance in his/her professional role. The result of the research will be a proposed inservice program which will have the capability to eliminate any duplication and inefficiency in existing programs. The study will have the spin-off benefit of testing teacher perception of elements and clusters that might be included in emerging preservice programs.

Our field tests indicate it will take you approximately 35 minutes to complete the instrument. Your response will be kept in strict confidence; in no case will anyone be able to ascertain individual responses. Your name is not and will not be listed on the data sheet and the computer code is used only to facilitate our analysis of data. While the research is concerned with projecting statewide needs, receipt of your individual response is most important if we are to reflect the 'true' perceptions of New York State occupational teachers.

Please complete and return the enclosed instrument in the self-addressed stamped manila envelope. We recognize that you have a busy schedule but request that the instrument be returned by March 1st. Directions for completing the instrument are attached.

Your cooperation in helping us complete this statewide study designed to improve inservice education for occupational teachers will be greatly appreciated.

Sincerely yours,

John Wilcox
Dr. John Wilcox, Director
Institute for Occupational Education

William E. Drake
Professor William E. Drake
Principal Investigator

Attached: Directions
Research Instrument
Prepaid Return Envelope

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N.Y. 14850

To: Selected Occupational Teachers in New York State

Subject: "...Inservice Needs..." Research Project

Date: March 2, 1973

Approximately ten days ago you received a questionnaire designed to measure your perception of certain teaching elements and clusters. Receipt of your completed instrument is very important to the successful completion of the project since only a sample of occupational teachers in each specialization was asked to participate. Won't you take approximately 30 minutes from your busy schedule to give us your response?

The project is devoted to the development of a proposed professional education inservice program that will provide training identified as important and needed by occupational teachers. Your completion of the instrument will contribute toward the 'maximum' teacher input we desire. Please feel free to respond as openly as possible; your answers will be held in strict confidence.

The success of this project, as is always the case, is dependent on the good will and cooperation of occupational teachers. We feel the objectives are worthwhile and that the results will be most beneficial to teacher educators as they plan inservice programs to meet occupational teacher's needs.

If you have already returned the instrument, please disregard this letter and accept our thanks for your cooperation.

Sincerely yours,

John Wilcox
Dr. John Wilcox, Director
Institute for Occupational Education

William E. Drake
Professor William E. Drake
Principal Investigator

New York State College of Agriculture and Life Sciences
a Statutory College of the State University
Cornell University

Department of Education
Stone Hall
Ithaca, N.Y. 14850

19 March 1973

Mr. R. H. Ely
Agriculture Instructor
Occupational Education Center
Anywhere, New York

Dear Ron:

Approximately a month ago you were sent a research instrument designed to obtain your assessment of certain teaching elements and clusters. Since you are one of a small sample of occupational teachers we asked to participate, receipt of your completed instrument is extremely important to the successful completion of the project. Won't you take approximately 30 minutes from your busy schedule to give us your response?

Your help will be sincerely appreciated. If you have already returned the instrument, please accept our thanks.

Sincerely yours,

Dr. John Wilcox, Director	Professor William E. Drake
Institute for Occupational Education	Principal Investigator

NOTE: If the instrument and instructions have been inadvertently misplaced, please return the enclosed pre-addressed postcard and we'll immediately forward a duplicate copy.

APPENDIX C

COOPERATING BOCES CENTERS AND VOCATIONAL HIGH SCHOOLS

COOPERATING OCCUPATIONAL CENTERS

Albany Vocational Center
Albany

Area Occupational Center
Albany

Area Occupational Center
Belmont

Area Occupational Center
Glenfield

Area Occupational Center
Ithaca

Area Occupational Center
Middleburg

Area Occupational Center
Poughkeepsie

Area Occupational Education Center
Mohawk and Herkimer

Area Occupational Education Center
Utica

Argyle Occupational Center
Argyle

Brookhaven Occupational Center
Bellport

Broome-Tioga Area Educational Center
Binghamton

Burgard Vocational High School
Buffalo

Cayuga County Occupational Center
Auburn

Center for Occupational Education
Valhalla

Central Technical High School
Syracuse

Charles May Occupational Center
Mt. Morris

Chenango Area Education Center
Norwich

Coopers Career Center
Painted Post

County Education Eenter
Westbury

Dix Avenue Occupational Center
Hudson Falls

Edison Technical and Industrial High School
Rochester

Emerson Vocational High School
Buffalo

Finger Lakes Occupational School
Stanley

Foreman Area Educational Center
Fairport

Fosdick-Masten Vocational High School
Buffalo

Genesee-Wyoming Occupational Center
Batavia

Harkness Educational Center
Buffalo

Harry Ward Occupational Center
Riverhead

Hewes Occupational Center
Ashville

Hutchinson Central Technical High School
Buffalo

Islip Occupational Center
Oakdale

Jefferson Vocational-Technical Center
Watertown

Kingston Occupational Center
Kingston

L. A. Wilson Technical Center
Dix Hills

LoGuidice Occupational Center
Fredonia

Madison-Oneida BOCES
Verona

McEvoy Educational Center
Cortland

McKinley Vocational High School
Buffalo

Myers Educational Center
Saratoga Springs

Niagara Area Educational Center
Sanborn

North Catskills Occupational Center
Grand Gorge

North Cattaragus Occupational Center
Ellicottville

Northeast Area Educational Center
Syosset

North Franklin Educational Center
Malone

Northwest Area Educational Center
Mineola

North Westchester Technical Center
Yorktown Heights

Northwest Technical Center
Odgensburgh

Occupational Center
Troy

Occupational Education Center
Goshen

Occupational Education Center
Johnstown

Occupational Education Center
Philmont

Occupational Education Center #1
Syracuse

Occupational Education Center #2
Syracuse

Occupational Education Center #3
Syracuse

Occupational Education Center
West Nyack

Orleans Occupational Center
Medina

Oswego County BOCES
Mexico

Otsego Area Occupational Center
Milford

Pauline Bush Area Occupational Center
Elmira

Potter Road Occupational Center
West Seneca

Putnam Area Vocational Center
Carmel

Rochambeau School
White Plains

Seaway Area Technical Center
Norwood

Seneca Vocational High School
Buffalo

South Cattaragus Occupational Center
Olean

Southeast Area Educational Center
North Belmore

Southwest Area Educational Center
Freeport

Southwest Technical Center
Balmat

Sullivan County Occupational Center
Liberty

Trott Vocational High School
Niagara Falls

Warrensburg Occupational Center
Warrensburg

Wayne County Occupational Center
Williamson

We-Mo-Co Occupational School
Spencerport

Western Deleware Area Center
Sidney Center

Wildwood Career Center
Hornell

Yandon-Dillon Educational Center
Buffalo

APPENDIX D

JURY OF OCCUPATIONAL EDUCATION CONSULTANTS

JURY OF OCCUPATIONAL EDUCATION CONSULTANTS

Professor John Crunkilton
Agricultural Education Division
College of Education
Virginia Polytechnic Institute and
State University
Blacksburg, Virginia

Mr. G. Earl Hay, Supervisor
Vocational Curriculum
Bureau of Secondary Curriculum Development
State Education Department
Albany, New York

Mr. Thomas Mahoney
Director, Occupational Education
Tompkins-Seneca-Tioga BOCES
555 Warren Road
Ithaca, New York

Professor Marion Minot
Community Service Education
N 228 B Van Rensselaer
Cornell University
Ithaca, New York

Dr. J. Dale Oliver
Project Director
Vocational Education Evaluation
Division of Vocational-Technical Education
College of Education
Virginia Polytechnic Institute and
State University
Blacksburg, Virginia

Mr. Lee Traver, Associate
Division of Occupational Education Supervision
[now Chief, Agricultural Education]
State Education Department
Albany, New York

APPENDIX E

SURVEY INSTRUMENT AND INSTRUCTIONS

Definitions:

Category--An easily recognized major function or duty of educational personnel under which related performance elements may be identified and classified.

Cluster of Elements--A compatible grouping of related performance elements brought together for greater meaning and understanding.

Performance Element--(skill, task, competency) A statement of an observable behavior which describes what a teacher will be doing as he/she functions in his/her professional role.

GENERAL INSTRUCTIONS: The performance elements and clusters for which your response is desired are listed on the left of the pages which follow. Their order of listing is not intended to influence their importance. A space is provided at the end of each cluster of performance elements so you can add performance elements that were inadvertently omitted. The four point scale goes from Low (or none) to High (or great) with equal value between each of the four points. Responses are desired for two broad divisions (IMPORTANCE LEVEL and PERFORMANCE LEVEL) listed under Column I and Column II.

COLUMN I. IMPORTANCE LEVEL. To complete Column I, please read each performance element [identified by a number enclosed in brackets, ex. (21)] as if the following underscored stem were attached: I believe the successful occupational teacher in (your specialization) will: Mark an "x" in the box [ ] which indicates your recommendation for the importance of each performance element in successfully fulfilling the responsibilities of an occupational teacher in your specialization. In other words, how important is it that a successful occupational teacher in your specialization: (read in each of the performance elements here). You are not rating yourself in this column: you are rating the degree of importance you believe should be attached to each performance element for an occupational teacher in your specialization to be successful. Please check your response to each item in Column I before continuing with your instructions for Column II.

EXAMPLE	Column I IMPORTANCE LEVEL			
Stem: I believe the successful occupational teacher in (your specialization) will:	Low	Below Av.	Above Av.	High
(Performance Elements)				
(21) Present information with filmstrips......................	☐	☒	☐	☐
(146) Review general program objectives........................	☐	☐	☒	☐
(260) Formulate a system of grading consistent with school policy	☐	☐	☐	☒

COLUMN II. PERFORMANCE LEVEL. In this column, you are rating your performance level; be assured that your rating will be held in strict confidence. To complete Column II, place an "x" in the box /_/ which indicates your perception of your own performance level on each cluster (identified by a capital letter and number). Your performance level should be rated relative to what you perceive to be optimum performance by an occupational teacher in your specialization. Please do not intentionally inflate or deflate your perceived performance level; our projection of inservice needs of occupational teachers in New York State will be only as good as our data.

EXAMPLE	Column II PERFORMANCE LEVEL			
	Low	Below Av.	Above Av.	High
(Clusters)				
A-1. Utilizing Traditional Educational Technology ------------	☐	☒	☐	☐
D-1. Structuring/Designing a Course --------------------------	☐	☐	☒	☐
H-1. Evaluating Student Performance --------------------------	☐	☐	☐	☒

Definitions:

Category--An easily recognized major function or duty of educational personnel under which related performance elements may be identified and classified.

Cluster of Elements--A compatible grouping of related performance elements brought together for greater meaning and understanding.

Performance Element--(skill, task, competency) A statement of an observable behavior which describes what a teacher will be doing as he/she functions in his/her professional role.

GENERAL INSTRUCTIONS: The performance elements and clusters for which your response is desired are listed on the left of the pages which follow. Their order of listing is not intended to influence their importance. A space is provided at the end of each cluster of performance elements so you can add performance elements that were inadvertently omitted. The four point scale goes from Low (or none) to High (or great) with equal value between each of the four points. Responses are desired for two broad divisions (IMPORTANCE LEVEL and PERFORMANCE LEVEL) listed under Column I and Column II.

COLUMN I. IMPORTANCE LEVEL. To complete Column I, please read each performance element [identified by a number enclosed in brackets, ex.(21)] as if the following underscored stem were attached: I believe the successful occupational teacher in (the specialization of your assigned teacher) will: Mark an "x" in the box [ ] which indicates your recommendation for the importance of each performance element in this occupational teachers successfully fulfilling the responsibilities of an occupational teacher in his/her specialization. In other words, how important is it that a successful occupational teacher in his/her specialization: (read in each of the performance elements here)? You are not rating your assigned teacher in this column; you are rating the degree of importance you believe should be attached to each performance element for an occupational teacher in his/her specialization to be successful. Please check your response to each item in Column I before continuing with your instructions for Column II.

EXAMPLE

Stem: I believe the successful occupational teacher in (the specialization of your assigned teacher) will:	Column I IMPORTANCE LEVEL			
	Low	Below Av.	Above Av.	High
(Performance Elements)				
(21) Present information with filmstrips........................	[ ]	[x]	[ ]	[ ]
(146) Review general program objectives........................	[ ]	[ ]	[x]	[ ]
(260) Formulate a system of grading consistent with school policy	]	[ ]	[ ]	[x]

COLUMN II. PERFORMANCE LEVEL. In this column, you are rating your assigned teacher's performance level; be assured that your rating will be held in strict confidence. To complete Column II, place an "x" in the box /_/ which indicates your perception of his/her performance level on each cluster (identified by a capital letter and number). Your assigned teacher's performance level should be rated relative to what you perceive to be optimum performance by an occupational teacher in his/her specialization. Please do not intentionally inflate or deflate your assigned teacher's performance level; our projection of inservice needs of occupational teachers in New York State can be only as good as our data.

EXAMPLE

	Column II PERFORMANCE LEVEL			
	Low	Below Av.	Above Av.	High
(Clusters)				
A-1. Utilizing Traditional Educational Technology -----------	/_/	/x/	/_/	/_/
D-1. Structuring/Designing a Course --------------------------	/_/	/_/	/x/	/_/
H-1. Evaluating Student Performance --------------------------	/_/	/_/	/_/	/x/

Office Use Only ___(1) ___(2) : ___(3) ___(4) ___(5) : ___(6) : ___(7) : ___(8) ___(9)

SECTION I. TEACHER'S PROFESSIONAL PROFILE

10.___

1. Occupational course you teach (ex. welding): ____________________ 11.___

2. Position classification: (check √ one) 12.___
   (1)_____teacher
   (2)_____teacher assistant/aide

3. Highest level of formal education completed: (check √ one) 13.___
   (1)_____high school
   (2)_____high school + 30 semester hours of college
   (3)_____2 years of college
   (4)_____3 years of college
   (5)_____bachelors degree
   (6)_____masters degree or BS + 30 semester hours
   (7)_____post masters study

4. Have you completed a college supervised student teaching experience? 14.___
   (1)_____yes
   (2)_____no

5. How many semester hours of professional education (not counting supervised student teaching) have you completed? (check √ one) 15.___
   (1)_____6 semester hours or less
   (2)_____7 thru 12 semester hours
   (3)_____13 thru 18 semester hours
   (4)_____over 18 semester hours

6. Present New York State Certification: (check √ one) 16.___
   (1)_____Certificate of Default
   (2)_____Provisional
   (3)_____Permanent

7. Number of years teaching experience: (check √ one) 17.___
   (1)_____one
   (2)_____two
   (3)_____three
   (4)_____four
   (5)_____five
   (6)_____six thru ten
   (7)_____eleven thru fifteen
   (8)_____sixteen thru twenty
   (9)_____over twenty

8. Number of years related occupational experience: (check √ one) 18.___
   (1)_____none
   (2)_____one thru five
   (3)_____six thru ten
   (4)_____eleven thru fifteen
   (5)_____sixteen thru twenty
   (6)_____over twenty

9. Age: (check √ one) 19.___
   (1)_____20-29 years
   (2)_____30-39 years
   (3)_____40-49 years
   (4)_____50-59 years
   (5)_____60 or over

10. Sex: (check √ one) 20.___
    (1)_____female (2)_____male

Office Use Only (1) (2) : (3) (4) (5) : (6) : (7) : (8) (9)

SECTION I. SUPERVISOR'S PROFESSIONAL PROFILE

1. Highest level of formal education completed: (check ✓ one) 10.___
   (1)____Less than Bachelors Degree
   (2)____Bachelors Degree
   (3)____Masters Degree or BS + 30 Semester Hours
   (4)____Post Masters

2. Number of years teaching experience: (check ✓ one) 11.___
   (1)____None
   (2)____One thru five
   (3)____Six thru ten
   (4)____Eleven thru fifteen
   (5)____Sixteen thru twenty
   (6)____Over twenty

3. Number of years occupational education administrative/supervisory experience: (check ✓ one) 12.___
   (1)____One thru five
   (2)____Six thru ten
   (3)____Eleven thru fifteen
   (4)____Sixteen thru twenty
   (5)____Over twenty

4. Age: (check ✓ one) 13.___
   (1)____20-29 years
   (2)____30-39 years
   (3)____40-49 years
   (4)____50-59 years
   (5)____60 or over

5. Sex: (check ✓ one) 14.___
   (1)____Female
   (2)____Male

6. How frequently do you observe your assigned teacher's professional classroom/laboratory performance? ____ times per academic year 15.___

7. What is the duration of each observation (average) ? ____ minutes 16.___

SECTION II. PEDAGOGICAL ASSESSMENT INSTRUMENT

(see attached Part A___; Part B___; Part C___)

17. 0
18. 0
19. 0
20. 0

YOUR CONTRIBUTION TO THIS RESEARCH IS APPRECIATED

PERFORMANCE ORIENTED PROFESSIONAL EDUCATION INSERVICE NEEDS OF SECONDARY LEVEL OCCUPATIONAL TEACHERS IN NEW YORK STATE, a study sponsored by the Cornell Institute for Research and Development in Occupational Education and the Division of Agricultural and Occupational Education, Department of Education, Cornell University, Ithaca, New York

PART A (PLEASE REFER TO THE DIRECTION PAGE PRIOR TO COMPLETING EACH COLUMN)	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
Category A. Executing (Implementing) Instruction									
(Clusters)									
A-1. Utilizing Traditional Educational Technology					☐	☐	☐	☐	21.___
(Performance Elements)									
(21) Present information with filmstrips	[ ]	[ ]	[ ]	[ ]					22.___
(22) Present information with slides	[ ]	[ ]	[ ]	[ ]					23.___
(23) Present information with sound motion pictures	[ ]	[ ]	[ ]	[ ]					24.___
(24) Present information with the overhead projector	[ ]	[ ]	[ ]	[ ]					25.___
(25) Present information with the opaque projector	[ ]	[ ]	[ ]	[ ]					26.___
(26) Present information with the audio tape recorder	[ ]	[ ]	[ ]	[ ]					27.___
(27) Present information with single concept films	[ ]	[ ]	[ ]	[ ]					28.___
(28) Present information with a record player	[ ]	[ ]	[ ]	[ ]					29.___
( ) Others.....									30.___
A-2. Utilizing Innovative Educational Technology					☐	☐	☐	☐	31.___
(Performance Elements)									
(29) Present information with educational television	[ ]	[ ]	[ ]	[ ]					32.___
(30) Present information with a video recorder or closed circuit television	[ ]	[ ]	[ ]	[ ]					33.___
(31) Present information with a tele-speaker(telephone amplifier)	[ ]	[ ]	[ ]	[ ]					34.___
(32) Direct teaching machine programmed instruction	[ ]	[ ]	[ ]	[ ]					35.___
( ) Others.....									36.___
A-3. Utilizing Visual Aids					☐	☐	☐	☐	37.___
(Performance Elements)									
(33) Present information with bulletin boards	[ ]	[ ]	[ ]	[ ]					38.___
(34) Present information with exhibits	[ ]	[ ]	[ ]	[ ]					39.___
(35) Present information with the aid of a flannel board	[ ]	[ ]	[ ]	[ ]					40.___
(36) Present information with the aid of a flip chart	[ ]	[ ]	[ ]	[ ]					41.___
(37) Present information with the aid of a chalk board	[ ]	[ ]	[ ]	[ ]					42.___
(38) Illustrate with models and real objects	[ ]	[ ]	[ ]	[ ]					43.___
( ) Others.....									44.___
A-4. Employing Group Interaction Techniques					☐	☐	☐	☐	45.___
(Performance Elements)									
(39) Conduct buzz groups	[ ]	[ ]	[ ]	[ ]					46.___
(40) Conduct symposiums	[ ]	[ ]	[ ]	[ ]					47.___
(41) Conduct panel discussions	[ ]	[ ]	[ ]	[ ]					48.___
(42) Employ question box technique	[ ]	[ ]	[ ]	[ ]					49.___
(43) Conduct brainstorming sessions	[ ]	[ ]	[ ]	[ ]					50.___
(44) Lead group discussions	[ ]	[ ]	[ ]	[ ]					51.___
(45) Employ role playing techniques	[ ]	[ ]	[ ]	[ ]					52.___
( ) Others.....									53.___

PART A continued	Column I IMPORTANCE LEVEL Low	Below Av.	Above Av.	High	Column II PERFORMANCE LEVEL Low	Below Av.	Above Av.	High	Office Use Only:
A-5. Employing Teacher-Centered Methods of Presentation ----------					☐	☐	☐	☐	54.___
(Performance Elements)									
(46) Demonstrate a manipulative skill..........	[ ]	[ ]	[ ]	[ ]					55.___
(47) Present a concept or principle through a demonstration..........	[ ]	[ ]	[ ]	[ ]					56.___
(48) Give a lecture..........	[ ]	[ ]	[ ]	[ ]					57.___
(49) Give an illustrated talk..........	[ ]	[ ]	[ ]	[ ]					58.___
(50) Present information with analogies..........	[ ]	[ ]	[ ]	[ ]					59.___
(51) Present information through individualized instruction..........	[ ]	[ ]	[ ]	[ ]					60.___
(52) Present information through team teaching..........	[ ]	[ ]	[ ]	[ ]					61.___
(53) Give an assignment..........	[ ]	[ ]	[ ]	[ ]					62.___
( ) Others.....									63.___
A-6. Applying Basic Instructional Strategies ----------					☐	☐	☐	☐	64.___
(Performance Elements)									
(54) Conduct group supervised study..........	[ ]	[ ]	[ ]	[ ]					65.___
(55) Present information through case-study problems..........	[ ]	[ ]	[ ]	[ ]					66.___
(56) Introduce a lesson..........	[ ]	[ ]	[ ]	[ ]					67.___
(57) Obtain summary for a lesson..........	[ ]	[ ]	[ ]	[ ]					68.___
(58) Employ oral questioning techniques..........	[ ]	[ ]	[ ]	[ ]					69.___
(59) Acknowledge student verbal and non-verbal cues..........	[ ]	[ ]	[ ]	[ ]					70.___
(60) Enrich instruction to challenge the abilities of more able students..........	[ ]	[ ]	[ ]	[ ]					71.___
(61) Reinforce learning..........	[ ]	[ ]	[ ]	[ ]					72.___
(62) Provide remedial work for slower students..........	[ ]	[ ]	[ ]	[ ]					73.___
(63) Employ reward techniques..........	[ ]	[ ]	[ ]	[ ]					74.___
(64) Establish frames of reference to enable students to understand a situation from several... points of view.	[ ]	[ ]	[ ]	[ ]					75.___
(65) Apply non-verbal techniques (gestures, facial expressions, silence, etc.)..........	[ ]	[ ]	[ ]	[ ]					76.___
(66) Direct students in applying problem solving techniques..........	[ ]	[ ]	[ ]	[ ]					77.___
( ) Others.....									78.___
					0 2 : (1)(2)(3)(4)(5)(6)(7)			: :	: (8)(9)
A-7. Utilizing Community Resources ----------					☐	☐	☐	☐	10.___
(Performance Elements)									
(67) Present information with the assistance of a resource person..........	[ ]	[ ]	[ ]	[ ]					11.___
(68) Direct students in gathering information from sources in the community..........	[ ]	[ ]	[ ]	[ ]					12.___
(69) Conduct field trips..........	[ ]	[ ]	[ ]	[ ]					13.___
( ) Others.....									14.___
A-8. Directing Instruction by Students ----------					☐	☐	☐	☐	15.___
(Performance Elements)									
(70) Direct students in instructing other students..........	[ ]	[ ]	[ ]	[ ]					16.___
(71) Direct student presentations..........	[ ]	[ ]	[ ]	[ ]					17.___
( ) Others.....									18.___

PART A continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
A-9. Directing Laboratory Instruction					☐	☐	☐	☐	19.___
(Performance Elements)									
(72) Direct student laboratory experience.	[ ]	[ ]	[ ]	[ ]					20.___
(73) Direct students in preparing laboratory work or job plans.	[ ]	[ ]	[ ]	[ ]					21.___
(74) Guide student progress through the use of operation and/or job sheets.	[ ]	[ ]	[ ]	[ ]					22.___
(75) Present information by the project method.	[ ]	[ ]	[ ]	[ ]					23.___
( ) Others.....									24.___
A-10. Directing Independent Study					☐	☐	☐	☐	25.___
(Performance Elements)									
(76) Direct student study of information and assignment sheets.	[ ]	[ ]	[ ]	[ ]					26.___
(77) Direct student study of textbooks, bulletins, and pamphlets.	[ ]	[ ]	[ ]	[ ]					27.___
(78) Direct written programmed instruction.	[ ]	[ ]	[ ]	[ ]					28.___
( ) Others.....									29.___
Category B. Management									
(Clusters)									
B-1. Projecting Instructional Resource Needs					☐	☐	☐	☐	30.___
(Performance Elements)									
(79) Compile a list of supplies needed for the academic year.	[ ]	[ ]	[ ]	[ ]					31.___
(80) Identify new tools and/or equipment needed for the academic year.	[ ]	[ ]	[ ]	[ ]					32.___
(81) Recommend reference books and periodicals for acquisition by the library.	[ ]	[ ]	[ ]	[ ]					33.___
( ) Others.....									34.___
B-2. Preparing an Annual Budget					☐	☐	☐	☐	35.___
(Performance Elements)									
(82) Prepare a capital outlay budget proposal for new equipment.	[ ]	[ ]	[ ]	[ ]					36.___
(83) Plan an operating budget proposal for consumable supplies, services, and instructional materials.	[ ]	[ ]	[ ]	[ ]					37.___
(84) Prepare a budget for estimating travel expenses incurred in occupational activities.	[ ]	[ ]	[ ]	[ ]					38.___
( ) Others.....									39.___
B-3. Procuring Supplies and Facilities					☐	☐	☐	☐	40.___
(Performance Elements)									
(85) Accept gifts or donations of supplies and equipment for the occupational education program in accordance with school policy.	[ ]	[ ]	[ ]	[ ]					41.___
(86) Prepare purchase requests for approved occupational equipment and supplies.	[ ]	[ ]	[ ]	[ ]					42.___
(87) Arrange for additional occupational facilities to accomodate expanded enrollments and technological advancements.	[ ]	[ ]	[ ]	[ ]					43.___
(88) Design a procedure for acquiring needed consumable supplies and materials.	[ ]	[ ]	[ ]	[ ]					44.___
(89) Devise a system for determining and collecting student fees for consumable supplies.	[ ]	[ ]	[ ]	[ ]					45.___
( ) Others.....									46.___

PART A continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
B-4. Maintaining Records and Files					☐	☐	☐	☐	47.___
(Performance Elements)									
(90) Structure a filing system for records and report forms	[ ]	[ ]	[ ]	[ ]					48.___
(91) Supply the data for occupational reports required by the state department of education	[ ]	[ ]	[ ]	[ ]					49.___
(92) Devise a filing system for instructional materials	[ ]	[ ]	[ ]	[ ]					50.___
(93) Devise a system for maintaining occupational opportunity information for use by occupational students	[ ]	[ ]	[ ]	[ ]					51.___
(94) Assemble student files documenting personal characteristics, attitudes, and grades	[ ]	[ ]	[ ]	[ ]					52.___
( ) Others.....									53.___
B-5. Assuring Laboratory Safety					☐	☐	☐	☐	54.___
(Performance Elements)									
(95) Provide approved safety apparel and devices for occupational students assigned to hazardous equipment	[ ]	[ ]	[ ]	[ ]					55.___
(96) Establish a procedure for attending to the first aid needs of students	[ ]	[ ]	[ ]	[ ]					56.___
(97) Maintain a record of safety instruction presented in compliance with safety laws	[ ]	[ ]	[ ]	[ ]					57.___
( ) Others.....									58.___
B-6. Establishing Acceptable Student Behavior					☐	☐	☐	☐	59.___
(Performance Elements)									
(98) Uphold school standards of expected student behavior	[ ]	[ ]	[ ]	[ ]					60.___
(99) Formulate with students acceptable standards of behavior in occupational classrooms & labs	[ ]	[ ]	[ ]	[ ]					61.___
(100) Uphold acceptable standards of student behavior in occupational classrooms and labs	[ ]	[ ]	[ ]	[ ]					62.___
(101) Carry out approved disciplinary action when warrented	[ ]	[ ]	[ ]	[ ]					63.___
(102) Encourage students to exercise self discipline	[ ]	[ ]	[ ]	[ ]					64.___
(103) Control outbursts of fighting and aggressive behavior	[ ]	[ ]	[ ]	[ ]					65.___
( ) Others.....									66.___
B-7. Managing the Laboratory					☐	☐	☐	☐	67.___
(Performance Elements)									
(104) Maintain an inventory of occupational tools, supplies, and equipment	[ ]	[ ]	[ ]	[ ]					68.___
(105) Establish a system for repairing and servicing tools and equipment in the laboratory	[ ]	[ ]	[ ]	[ ]					69.___
(106) Arrange for the storage and security of supplies and equipment	[ ]	[ ]	[ ]	[ ]					70.___
(107) Implement student check-out procedures for tools, supplies, and equipment used in the lab	[ ]	[ ]	[ ]	[ ]					71.___
(108) Direct students in a system for cleaning and maintaining the laboratory	[ ]	[ ]	[ ]	[ ]					72.___
(109) Schedule laboratory equipment for maximum utilization by students	[ ]	[ ]	[ ]	[ ]					73.___
(110) Arrange layout of the occupational laboratory to simulate the occupational environment	[ ]	[ ]	[ ]	[ ]					74.___
(111) Arrange laboratory work areas and storage space to facilitate student performance	[ ]	[ ]	[ ]	[ ]					75.___
(112) Control heat, light, and ventilation in occupational laboratories and classrooms	[ ]	[ ]	[ ]	[ ]					76.___
(113) Establish a policy for use of the physical facilities and equipment by other school personnel and outside groups	[ ]	[ ]	[ ]	[ ]					77.___
( ) Others.....									78.___

PART A continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
Category C. School-Community Relations					0	3 :		: :	:
(Clusters)					(1)(2)	(3)	(4)(5)	(6)(7)	(8)(9)
C-1. Planning School-Community Relations Activities --					☐	☐	☐	☐	10.___
(Performance Elements)									
(114) Assist in the development of policies regarding school-community relations..............	☐	☐	☐	☐					11.___
(115) Plan school-community relations activities for the occupational education program........	☐	☐	☐	☐					12.___
(116) Procure school administration clearance to conduct school-community relations activities.	☐	☐	☐	☐					13.___
( ) Others.....									14.___
C-2. Publicizing Occupational Education and the School's Occupational Program ----------------					☐	☐	☐	☐	15.___
(Performance Elements)									
(117) Provide brochures to inform the school and community of the occupational program.........	☐	☐	☐	☐					16.___
(118) Provide displays in the school and community on the occupational education program.......	☐	☐	☐	☐					17.___
(119) Prepare news releases and manuscripts on activities of the occupational program..........	☐	☐	☐	☐					18.___
(120) Speak to school and community groups on the occupational program.........................	☐	☐	☐	☐					19.___
(121) Present activities of the occupational program on radio..................................	☐	☐	☐	☐					20.___
(122) Present activities of the occupational program on television.............................	☐	☐	☐	☐					21.___
(123) Direct student presentations describing activities of the occupational program...........	☐	☐	☐	☐					22.___
( ) Others.....									23.___
C-3. Maintaining Good School-Community Relations --					☐	☐	☐	☐	24.___
(Performance Elements)									
(124) Conduct an open house to familiarize members of the school and community with activities of the occupational education program..	☐	☐	☐	☐					25.___
(125) Sponsor student-parent activities for the occupational education program.................	☐	☐	☐	☐					26.___
(126) Assist with special community social events..	☐	☐	☐	☐					27.___
(127) Assist with community business and industry sponsored activities.........................	☐	☐	☐	☐					28.___
(128) Serve in professional non-occupational organizations to improve the image of the occupational education program...	☐	☐	☐	☐					29.___
(129) Serve in community civic, service, or social organizations to improve the image of the occupational education program...	☐	☐	☐	☐					30.___
(130) Provide consultant services to local business and industry...............................	☐	☐	☐	☐					31.___
(131) Maintain liaison with union officials and employers......................................	☐	☐	☐	☐					32.___
(132) Maintain liaison with employment agencies..	☐	☐	☐	☐					33.___
(133) Maintain liaison with community professional, service, fraternal, social, and religious organizations..	☐	☐	☐	☐					34.___
(134) Maintain good relations with other schools...	☐	☐	☐	☐					35.___
( ) Others.....									36.___
C-4. Obtaining School-Community Feedback on the Occupational Program ------------------------					☐	☐	☐	☐	37.___
(Performance Elements)									
(135) Obtain informal feedback through contacts with individuals in the school and community...	☐	☐	☐	☐					38.___
(136) Conduct opinion surveys in the school and community concerning the occupational program..	☐	☐	☐	☐					39.___
(137) Analyze enrollment trends to determine student and parent acceptance of the occupational program..	☐	☐	☐	☐					40.___

PART A continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
(138) Obtain information from parents concerning their expectations of the occupational program	☐	☐	☐	☐					41.___
(139) Consult the advisory committee to obtain information concerning their expectations of the occupational education program........	☐	☐	☐	☐					42.___
(140) Study community voting results on financial issues affecting the occupational program....	☐	☐	☐	☐					43.___
(141) Acquire information from members of the community power structure (political, social, and economic pressure groups) regarding their expectations of the occupational program...	☐	☐	☐	☐					44.___
( ) Others.....									45.___
C-5. Maintaining Good Intra-School Relationships ---------- (Performance Elements)					☐	☐	☐	☐	46.___
(142) Express a philosophy consistent with that of the occupational staff........	☐	☐	☐	☐					47.___
(143) Maintain good working relationships with the school administration and faculty........	☐	☐	☐	☐					48.___
(144) Assist in planning the goals of the total school program........	☐	☐	☐	☐					49.___
(145) Maintain good working relationships with the school supporting staff........	☐	☐	☐	☐					50.___
( ) Others.....									51.___

PERFORMANCE ORIENTED PROFESSIONAL EDUCATION INSERVICE NEEDS OF SECONDARY LEVEL OCCUPATIONAL TEACHERS IN NEW YORK STATE, a study sponsored by the Cornell Institute for Research and Development in Occupational Education and the Division of Agricultural and Occupational Education, Department of Education, Cornell University, Ithaca, New York

PART B (PLEASE REFER TO THE DIRECTION PAGE PRIOR TO COMPLETING EACH COLUMN)	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
Category D. Planning Instruction					0 4 :			: :	:
(Clusters)					(1)(2)	(3)	(4)(5)	(6)(7)	(8)(9)
D-1. Structuring/Designing a Course					☐	☐	☐	☐	21.___
(Performance Elements)									
(146) Review general program objectives	☐	☐	☐	☐					22.___
(147) Review student performance objectives	☐	☐	☐	☐					23.___
(148) Sequence student performance objectives for a course	☐	☐	☐	☐					24.___
(149) Involve students in planning a unit	☐	☐	☐	☐					25.___
(150) Determine student needs and interest	☐	☐	☐	☐					26.___
(151) Select student performance objectives for a unit	☐	☐	☐	☐					27.___
(152) Write content outline for a unit	☐	☐	☐	☐					28.___
(153) Correlate unit content with on-the-job and/or laboratory experiences	☐	☐	☐	☐					29.___
(154) Determine group and individual learning experiences based on individual differences of students	☐	☐	☐	☐					30.___
(155) Select methods of evaluating students' performance throughout a unit	☐	☐	☐	☐					31.___
( ) Others.....									32.___
D-2. Planning a Lesson					☐	☐	☐	☐	33.___
(Performance Elements)									
(156) Identify student performance objectives	☐	☐	☐	☐					34.___
(157) Select teaching techniques	☐	☐	☐	☐					35.___
(158) Plan the introduction of a lesson	☐	☐	☐	☐					36.___
(159) Plan the content of a lesson	☐	☐	☐	☐					37.___
(160) Plan the summary of a lesson	☐	☐	☐	☐					38.___
(161) Plan student learning experiences	☐	☐	☐	☐					39.___
(162) Select methods of evaluating students' attainment of specific performance objectives	☐	☐	☐	☐					40.___
(163) Write a lesson plan	☐	☐	☐	☐					41.___
( ) Others.....									42.___
D-3. Selecting Instructional Resources					☐	☐	☐	☐	43.___
(Performance Elements)									
(164) Obtain textbooks, reference, and other instructional materials	☐	☐	☐	☐					44.___
(165) Select tools and equipment for a lesson	☐	☐	☐	☐					45.___
(166) Assemble consumable supplies for instructional purposes	☐	☐	☐	☐					46.___
( ) Others.....									47.___
D-4. Developing Instructional Materials					☐	☐	☐	☐	48.___
(Performance Elements)									
(167) Develop instructional materials (ex. transparencies, charts, assignment sheets, etc.)	☐	☐	☐	☐					49.___
(168) Prepare instructional materials with a spirit duplicator	☐	☐	☐	☐					50.___
(169) Prepare instructional materials with a stencil duplicator	☐	☐	☐	☐					51.___
(170) Prepare instructional materials with a photocopier	☐	☐	☐	☐					52.___
(171) Involve students in the preparation of instructional materials	☐	☐	☐	☐					53.___
( ) Others.....									54.___

PART B continued

	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
Category E. Guidance (Clusters)									
E-1. Obtaining Background Information on Students --------------- (Performance Elements)					☐	☐	☐	☐	55.___
(172) Determine students' background and environment..........	[ ]	[ ]	[ ]	[ ]					56.___
(173) Analyze students' cumulative records..........	[ ]	[ ]	[ ]	[ ]					57.___
(174) Maintain anecdotal records on students..........	[ ]	[ ]	[ ]	[ ]					58.___
(175) Determine relationships among students through sociometric techniques (eg. sociogram)...	[ ]	[ ]	[ ]	[ ]					59.___
(176) Review students' autobiographies for information to aid in understanding the students...	[ ]	[ ]	[ ]	[ ]					60.___
(177) Assemble information for case study reports..........	[ ]	[ ]	[ ]	[ ]					61.___
( ) Others.....	[ ]	[ ]	[ ]	[ ]					62.___
E-2. Promoting Constructive Teacher-Student Relationships --------------- (Performance Elements)					☐	☐	☐	☐	63.___
(178) Communicate with prospective and continuing students during the summer..........	[ ]	[ ]	[ ]	[ ]					64.___
(179) Maintain an open door policy for student consultation..........	[ ]	[ ]	[ ]	[ ]					65.___
(180) Encourage students to discuss career aspirations..........	[ ]	[ ]	[ ]	[ ]					66.___
(181) Demonstrate personal concern for the student and his family..........	[ ]	[ ]	[ ]	[ ]					67.___
(182) Conduct home visits..........	[ ]	[ ]	[ ]	[ ]					68.___
( ) Others.....									69.___
E-3. Counseling Students --------------- (Performance Elements)					☐	☐	☐	☐	70.___
(183) Recognize potential problems of students..........	[ ]	[ ]	[ ]	[ ]					71.___
(184) Conduct a conference for counseling a student..........	[ ]	[ ]	[ ]	[ ]					72.___
(185) Conduct group counseling sessions..........	[ ]	[ ]	[ ]	[ ]					73.___
(186) Confer with the student and his parents regarding his educational development..........	[ ]	[ ]	[ ]	[ ]					74.___
(187) Interpret occupational tests and inventories to students..........	[ ]	[ ]	[ ]	[ ]					75.___
(188) Assist students in developing good study havits..........	[ ]	[ ]	[ ]	[ ]					76.___
( ) Others.....									77.___
					0 5 : : : : (1)(2)(3)(4)(5)(6)(7)(8)(9)				
E-4. Involving Guidance Counselors in Assisting Students --------------- (Performance Elements)					☐	☐	☐	☐	10.___
(189) Establish communication patterns for exchanging information with the guidance staff.....	[ ]	[ ]	[ ]	[ ]					11.___
(190) Supply guidance staff with performance data about students..........	[ ]	[ ]	[ ]	[ ]					12.___
(191) Refer students to guidance staff and other specialists..........	[ ]	[ ]	[ ]	[ ]					13.___
(192) Arrange for guidance counselors to administer and interpret personality, aptitude, and intelligence tests for specific students..........	[ ]	[ ]	[ ]	[ ]					14.___
( ) Others.....									15.___

PART B continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
E-5. Involving Other Persons and Agencies in Assisting Students ------------------------------ (Performance Elements)					☐	☐	☐	☐	16.___
(193) Assist students with their problems by working cooperatively with outside agencies (ex. health and welfare services)	[ ]	[ ]	[ ]	[ ]					17.___
(194) Work with other teachers to help students with individual concerns	[ ]	[ ]	[ ]	[ ]					18.___
(195) Refer students to qualified resource persons for occupational and educational information	[ ]	[ ]	[ ]	[ ]					19.___
(196) Arrange for the local office of the U. S. Employment Service to administer and interpret the General Aptitude Test Battery	[ ]	[ ]	[ ]	[ ]					20.___
( ) Others.....									21.___
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment ------- (Performance Elements)					☐	☐	☐	☐	22.___
(197) Present information to students on occupational opportunities	[ ]	[ ]	[ ]	[ ]					23.___
(198) Present information to students on advanced training and educational opportunities available to them	[ ]	[ ]	[ ]	[ ]					24.___
(199) Assist students in determining ways to best describe their saleable skills	[ ]	[ ]	[ ]	[ ]					25.___
(200) Assist graduating students in preparing for interviews with potential employers	[ ]	[ ]	[ ]	[ ]					26.___
(201) Assist students in securing and completing applications for jobs, scholarships, educational loans, or college admission	[ ]	[ ]	[ ]	[ ]					27.___
(202) Write letters of recommendation for students	[ ]	[ ]	[ ]	[ ]					28.___
( ) Others.....									29.___

PART B continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
Category F. Student Occupational Organization (Clusters)					0 6 : (1)(2)(3)	(4)	(5)	:(6) :(7)	: (8)(9)
F-1. Establishing a Student Occupational Organization--- (Performance Elements)					☐	☐	☐	☐	10.___
(203) Obtain school administration approval for establishing a student occupational organization..........	[ ]	[ ]	[ ]	[ ]					11.___
(204) Contact state department personnel regarding the steps to follow in organizing a student occupational organization..........	[ ]	[ ]	[ ]	[ ]					12.___
(205) Acquaint prospective members and their parents with the purposes, activities, and values of the student occupational organization..........	[ ]	[ ]	[ ]	[ ]					13.___
(206) Organize a student committee to assess student interest in joining a student occupational organization..........	[ ]	[ ]	[ ]	[ ]					14.___
(207) Assist in developing a constitution and bylaws for the student occupational organization	[ ]	[ ]	[ ]	[ ]					15.___
( ) Others.....									16.___
F-2. Advising a Student Occupational Organization --- (Performance Elements)					☐	☐	☐	☐	17.___
(208) Conduct an organizational meeting for a student occupational organization..........	[ ]	[ ]	[ ]	[ ]					18.___
(209) Direct initiation/installation activities of the student occupational organization......	[ ]	[ ]	[ ]	[ ]					19.___
(210) Orient students to the student occupational organization..........	[ ]	[ ]	[ ]	[ ]					20.___
(211) Assist in the election and installation of officers..........	[ ]	[ ]	[ ]	[ ]					21.___
(212) Conduct leadership training sessions for the officers..........	[ ]	[ ]	[ ]	[ ]					22.___
(213) Obtain assistance of state department personnel in maintaining the student occupational organization..........	[ ]	[ ]	[ ]	[ ]					23.___
(214) Assist students in developing a yearly program of work..........	[ ]	[ ]	[ ]	[ ]					24.___
(215) Assist students in advancing within the student occupational organization (degrees, rank)	[ ]	[ ]	[ ]	[ ]					25.___
(216) Supervise social and educational activities for the student occupational organization...	[ ]	[ ]	[ ]	[ ]					26.___
(217) Involve elected chapter parents in the activities of the student occupational organ.....	[ ]	[ ]	[ ]	[ ]					27.___
(218) Assist students with publicizing student occupational organization activities..........	[ ]	[ ]	[ ]	[ ]					28.___
(219) Assist students with financial management of the student occupational organization......	[ ]	[ ]	[ ]	[ ]					29.___
(220) Assist students in planning and organizing fund-raising activities for the student occupational organization..........	[ ]	[ ]	[ ]	[ ]					30.___
(221) Maintain a file of publications available for the student occupational organization.....	[ ]	[ ]	[ ]	[ ]					31.___
(222) Supervise the development of an annual handbook and/or scrapbook for the student occupational organization..........	[ ]	[ ]	[ ]	[ ]					32.___
(223) Maintain the student occupational organization program as an integral part of instruction..........	[ ]	[ ]	[ ]	[ ]					33.___
(224) Evaluate the student occupational organization..........	[ ]	[ ]	[ ]	[ ]					34.___
( ) Others.....									35.___

PART B continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
F-3. Participating in State and National Student Occupational Organization Activities ---------					☐	☐	☐	☐	36.___
(Performance Elements)									
(225) Affiliate the student occupational organization with the state and national organization.	☐	☐	☐	☐					37.___
(226) Assist in the preparation of state and national reports for the student occupational organization........	☐	☐	☐	☐					38.___
(227) Provide advice and training for student entries in state and national student occupational organization contests........	☐	☐	☐	☐					39.___
(228) Send student representatives to district, state, regional, and national student occupational organization activities........	☐	☐	☐	☐					40.___
(229) Assist in the development of rules and procedures for conducting district, state, regional, and national student occupational organization contests........	☐	☐	☐	☐					41.___
(230) Participate in district, state, regional, and national activities of the student occupational organization........	☐	☐	☐	☐					42.___
(231) Serve as an advisor or judge for district, state, regional, or national student occupational organization contests........	☐	☐	☐	☐					43.___
( ) Others.....									44.___
Category G. Professional Role and Development									
(Clusters)									
G-1. Upholding the Philosophy and Goals of the Profession ----------------------------------					☐	☐	☐	☐	45.___
(Performance Elements)									
(232) Identify current trends of the teaching profession........	☐	☐	☐	☐					46.___
(233) Promote the attainment of the goals of the teaching profession........	☐	☐	☐	☐					47.___
(234) Express a personal professional philosophy consistent with the goals of occupational education........	☐	☐	☐	☐					48.___
(235) Maintain the ethical standards expected of a professional educator........	☐	☐	☐	☐					49.___
( ) Others.....									50.___
G-2. Contributing Professional Service ----------------------------------					☐	☐	☐	☐	51.___
(Performance Elements)									
(236) Support professional organizations through membership and attendance at meetings........	☐	☐	☐	☐					52.___
(237) Serve professional organizations as an officer and/or chairman or committee member........	☐	☐	☐	☐					53.___
(238) Represent the teaching profession as a committee member, delegate, or program participant at meetings and activities of other related professions........	☐	☐	☐	☐					54.___
(239) Participate in experimental and other data collecting research activities........	☐	☐	☐	☐					55.___
(240) Write an article for publication which contributes to the literature of the profession...	☐	☐	☐	☐					56.___
(241) Assist in orienting teachers who are new to the school system........	☐	☐	☐	☐					57.___
(242) Work with a team from the school and/or community on pertinent school activities........	☐	☐	☐	☐					58.___
(243) Serve community needs by contributing professional expertise to community activities.....	☐	☐	☐	☐					59.___
( ) Others.....									60.___

PART B continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
G-3. Advancing One's Professional Competencies -- (Performance Elements)					☐	☐	☐	☐	61.___
(244) Exchange observational visits, innovations, and ideas with others in the profession.....	[ ]	[ ]	[ ]	[ ]					62.___
(245) Consult supervisory and administrative evaluations to determine attitudes of others toward one's personal and professional abilities and limitations..........................	[ ]	[ ]	[ ]	[ ]					63.___
(246) Use a self-analysis form to evaluate personal and professional abilities and limitations	[ ]	[ ]	[ ]	[ ]					64.___
(247) Select the teaching position which is in keeping with personal and professional abilities..	[ ]	[ ]	[ ]	[ ]					65.___
(248) Maintain professional certification plus expand educational background and leadership potential through enrolling in graduate, extension, and inservice education programs....	[ ]	[ ]	[ ]	[ ]					66.___
(249) Keep up-to-date through reading professional literature..........................	[ ]	[ ]	[ ]	[ ]					67.___
(250) Acquire new occupational skills and information needed to keep pace with technological advancement..	[ ]	[ ]	[ ]	[ ]					68.___
(251) Update professional personnel file regularly....................................	[ ]	[ ]	[ ]	[ ]					69.___
( ) Others.....									70.___
G-4. Supervising Student Teachers -- (Performance Elements)					☐	☐	☐	☐	71.___
(252) Provide opportunities for potential teachers to observe and participate in the public school program..	[ ]	[ ]	[ ]	[ ]					72.___
(253) Interpret the policies and regulations of the local school district to the student teacher..	[ ]	[ ]	[ ]	[ ]					73.___
(254) Plan activities for the student teacher which draw upon and enrich college course work..	[ ]	[ ]	[ ]	[ ]					74.___
(255) Assign responsibilities commensurate with the student teacher's background of knowledge and experience..	[ ]	[ ]	[ ]	[ ]					75.___
(256) Demonstrate instructional techniques for student teachers.........................	[ ]	[ ]	[ ]	[ ]					76.___
(257) Consult regularly with the student teacher regarding planning, implementing, and evaluating teaching..	[ ]	[ ]	[ ]	[ ]					77.___
(258) Confer regularly with the student teacher regarding performance in the student teaching situation..	[ ]	[ ]	[ ]	[ ]					78.___
(259) Confer with the college supervisor and the student teacher regarding plans for and evaluation of the total student teaching experience..............................	[ ]	[ ]	[ ]	[ ]					79.___
( ) Others.....									80.___

PERFORMANCE ORIENTED PROFESSIONAL EDUCATION INSERVICE NEEDS OF SECONDARY LEVEL OCCUPATIONAL TEACHERS IN NEW YORK STATE, a study sponsored by the Cornell Institute for Research and Development in Occupational Education and the Division of Agricultural and Occupational Education, Department of Education, Cornell University, Ithaca, New York

PART C (PLEASE REFER TO THE DIRECTION PAGE PRIOR TO COMPLETING EACH COLUMN)	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
Category H. Evaluating Instruction									
(Clusters)									
H-1. Evaluating Student Performance ----------					☐	☐	☐	☐	21.___
(Performance Elements)									
(260) Formulate a system of grading consistent with school policy..........	[ ]	[ ]	[ ]	[ ]					22.___
(261) Establish criteria for student performance..........	[ ]	[ ]	[ ]	[ ]					23.___
(262) Determine student's grade based on related instruction and lab or on-the-job experience..	[ ]	[ ]	[ ]	[ ]					24.___
(263) Appraise students products according to performance standards of the occupation..........	[ ]	[ ]	[ ]	[ ]					25.___
(264) Appraise students performance in relation to student performance objectives..........	[ ]	[ ]	[ ]	[ ]					26.___
(265) Evaluate individualized assignments completed under directed study..........	[ ]	[ ]	[ ]	[ ]					27.___
( ) Others.....									28.___
H-2. Involving Students in Evaluation ----------					☐	☐	☐	☐	29.___
(Performance Elements)									
(266) Devise self-evaluation techniques for use by students..........	[ ]	[ ]	[ ]	[ ]					30.___
(267) Arrange for students to evaluate their own progress..........	[ ]	[ ]	[ ]	[ ]					31.___
(268) Engage in cooperative evaluation of achievement with students..........	[ ]	[ ]	[ ]	[ ]					32.___
(269) Involve students in formulating procedures for their participation in instructional evaluation..........	[ ]	[ ]	[ ]	[ ]					33.___
(270) Interpret student's evaluation of instruction..........	[ ]	[ ]	[ ]	[ ]					34.___
( ) Others.....									35.___
H-3. Formulating Test and Rating Sheets ----------					☐	☐	☐	☐	36.___
(Performance Elements)									
(271) Formulate matching test items..........	[ ]	[ ]	[ ]	[ ]					37.___
(272) Formulate completion test items..........	[ ]	[ ]	[ ]	[ ]					38.___
(273) Formulate true-false test items..........	[ ]	[ ]	[ ]	[ ]					39.___
(274) Formulate multiple-choice test items..........	[ ]	[ ]	[ ]	[ ]					40.___
(275) Formulate essay test items..........	[ ]	[ ]	[ ]	[ ]					41.___
(276) Formulate test items for an oral exam..........	[ ]	[ ]	[ ]	[ ]					42.___
(277) Devise laboratory performance rating sheets..........	[ ]	[ ]	[ ]	[ ]					43.___
(278) Devise laboratory performance tests..........	[ ]	[ ]	[ ]	[ ]					44.___
( ) Others.....									45.___
H-4. Administering and Analyzing Tests ----------					☐	☐	☐	☐	46.___
(Performance Elements)									
(279) Analyze tests for reliability (consistency)..........	[ ]	[ ]	[ ]	[ ]					47.___
(280) Analyze tests for validity..........	[ ]	[ ]	[ ]	[ ]					48.___
(281) Devise case study problems..........	[ ]	[ ]	[ ]	[ ]					49.___
(282) Administer teacher made tests..........	[ ]	[ ]	[ ]	[ ]					50.___
( ) Others.....									51.___

PART C continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
H-5. Evaluating Quality of Instruction ------ (Performance Elements)					☐	☐	☐	☐	52.___
(283) Review student progress and/or achievement records to assess effectiveness of instruction	[ ]	[ ]	[ ]	[ ]					53.___
(284) Obtain information from fellow teachers and supervisory personnel regarding the quality of one's instruction..........	[ ]	[ ]	[ ]	[ ]					54.___
(285) Seek opportunities for self-evaluation of instruction (video tape, audio tape, etc.).....	[ ]	[ ]	[ ]	[ ]					55.___
( ) Others.....									56.___
Category I. Program Planning, Development, and Evaluation (Clusters)									
I-1. Planning, Conducting, and Utilizing a Community Survey ------ (Performance Elements)					☐	☐	☐	☐	57.___
(286) Organize a steering committee to assist in pre-planning community survey activities......	[ ]	[ ]	[ ]	[ ]					58.___
(287) Identify the geographical area in which an occupational education survey will be conducted..........	[ ]	[ ]	[ ]	[ ]					59.___
(288) Obtain administrative approval for conducting a community survey..........	[ ]	[ ]	[ ]	[ ]					60.___
(289) Solicit survey assistance of occupational education personnel from the state education department and or university..........	[ ]	[ ]	[ ]	[ ]					61.___
(290) Adapt existing community survey materials to local needs..........	[ ]	[ ]	[ ]	[ ]					62.___
(291) Consult the chamber of commerce to identify area employers to contact..........	[ ]	[ ]	[ ]	[ ]					63.___
(292) Consult the U. S. Employment Service to obtain information on manpower trends and needs..	[ ]	[ ]	[ ]	[ ]					64.___
(293) Persuade labor representatives to participate in the occupational education survey.......	[ ]	[ ]	[ ]	[ ]					65.___
(294) Recruit teachers and guidance counselors to participate in conducting the occupational education survey..........	[ ]	[ ]	[ ]	[ ]					66.___
(295) Establish communication with employer representatives who will be involved in the survey.	[ ]	[ ]	[ ]	[ ]					67.___
(296) Devise a plan of activities for the survey staff to follow..........	[ ]	[ ]	[ ]	[ ]					68.___
(297) Publicize the purposes and objectives of the survey..........	[ ]	[ ]	[ ]	[ ]					69.___
(298) Orient the survey staff to their duties and responsibilities in collecting data..........	[ ]	[ ]	[ ]	[ ]					70.___
(299) Collect data from employers to identify occupational education needs..........	[ ]	[ ]	[ ]	[ ]					71.___
(300) Collect student occupational interest data to identify occupational education needs......	[ ]	[ ]	[ ]	[ ]					72.___
(301) Suggest an occupational education program based on an analysis of the occupational survey	[ ]	[ ]	[ ]	[ ]					73.___
(302) Disseminate the findings of the community survey..........	[ ]	[ ]	[ ]	[ ]					74.___
( ) Others.....									75.___
					0 8 : : : :				
					(1)(2)(3)(4)(5)(6)(7)(8)(9)				
I-2. Organizing an Advisory Committee ------ (Performance Elements)					☐	☐	☐	☐	10.___
(303) Identify the role of the advisory committee..........	[ ]	[ ]	[ ]	[ ]					11.___
(304) Establish criteria for selection of the advisory committee members..........	[ ]	[ ]	[ ]	[ ]					12.___
(305) Obtain school board authorization for organizing the advirory committee..........	[ ]	[ ]	[ ]	[ ]					13.___

PART C continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
(306) Obtain administrative approval of the selected advisory committee members................	☐	☐	☐	☐					14.___
(307) Publicize the establishment of the advisory committee, its members, and its functions....	☐	☐	☐	☐					15.___
(308) Orient the advisory committee members to their role and function.........................	☐	☐	☐	☐					16.___
( ) Others.....									17.___
I-3. Maintaining and Utilizing an Advisory Committee --					☐	☐	☐	☐	18.___
(Performance Elements)									
(309) Plan the agenda to be considered by the advisory committee............................	☐	☐	☐	☐					19.___
(310) Orient the advisory committee members to their role and function.........................	☐	☐	☐	☐					20.___
(311) Invite resource persons to provide advisory committee consultation services..............	☐	☐	☐	☐					21.___
(312) Serve as liaison for the advisory committee and school administration....................	☐	☐	☐	☐					22.___
(313) Consult the advisory committee in planning an analysis of an occupation..................	☐	☐	☐	☐					23.___
(314) Consult the advisory committee in developing a long-range plan...........................	☐	☐	☐	☐					24.___
(315) Involve the advisory committee in conducting a community occupational education survey...	☐	☐	☐	☐					25.___
( ) Others.....									26.___
I-4. Planning the Occupational Program ---					☐	☐	☐	☐	27.___
(Performance Elements)									
(316) Assist in identification of occupational education purposes and objectives for the school	☐	☐	☐	☐					28.___
(317) Determine the occupations for which training is to be offered............................	☐	☐	☐	☐					29.___
(318) Analyze occupations with the assistance of employers and labor representatives...........	☐	☐	☐	☐					30.___
(319) Identify the competencies needed for entry into an occupation............................	☐	☐	☐	☐					31.___
(320) Describe the occupational standards of performance for each task in an occupation........	☐	☐	☐	☐					32.___
(321) Assist in writing general objectives for courses offered in the occupational program.....	☐	☐	☐	☐					33.___
(322) Develop occupational courses by clustering and sequencing related tasks..................	☐	☐	☐	☐					34.___
(323) Identify the skill, knowledge, and attitudes required for the performance of each occupational task included in a course..	☐	☐	☐	☐					35.___
(324) Write student performance objectives for the occupational education course..............	☐	☐	☐	☐					36.___
( ) Others.....									37.___
I-5. Preparing a Long-Range Occupational Program --					☐	☐	☐	☐	38.___
(Performance Elements)									
(325) Analyze long-range course needs for the occupational education program...................	☐	☐	☐	☐					39.___
(326) Specify the long-range facility, equipment, and supply needs for the occupational program	☐	☐	☐	☐					40.___
(327) Assist in the preparation of a long-range occupational budget............................	☐	☐	☐	☐					41.___
(328) Identify the long-range needs for employing faculty for the occupational program.........	☐	☐	☐	☐					42.___
(329) Assist in preparing the long-range program plan for occupational education..............	☐	☐	☐	☐					43.___
( ) Others.....									44.___
I-6. Evaluating the Occupational Program --					☐	☐	☐	☐	45.___
(Performance Elements)									
(330) Maintain continual follow-up on the placement, employment, and training status of students..	☐	☐	☐	☐					46.___
(331) Obtain follow-up data from employers of occupational program graduates..................	☐	☐	☐	☐					47.___

PART C continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
(332) Determine reasons students leave the occupational program	☐	☐	☐	☐					48. ___
(333) Review supervisory evaluation reports assessing the occupational program	☐	☐	☐	☐					49. ___
(334) Assess the relevency of the occupational course offerings	☐	☐	☐	☐					50. ___
(335) Assess the adequacy of the occupational education facilities and equipment	☐	☐	☐	☐					51. ___
(336) Disseminate a summary of the occupational education evaluation to the board of education, administrators, and advisory committee members	☐	☐	☐	☐					52. ___
( ) Others.....									53. ___
Category J. Coordination									
(Clusters)									
J-1. Selecting Student Learners					☐	☐	☐	☐	54. ___
(Performance Elements)									
(337) Establish criteria for selection of student-learners	☐	☐	☐	☐					55. ___
(338) Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation	☐	☐	☐	☐					56. ___
(339) Administer occupational tests relative to student-learner selection and placement	☐	☐	☐	☐					57. ___
(340) Gather student-learner selection data	☐	☐	☐	☐					58. ___
(341) Interview students and parents to obtain student-learner interest and aptitude information	☐	☐	☐	☐					59. ___
(342) Identify a prospective student-learner on the basis of selection criteria and data	☐	☐	☐	☐					60. ___
(343) Match a student-learner's unique characteristics with an appropriate training station	☐	☐	☐	☐					61. ___
( ) Others.....									62. ___
J-2. Selecting Training Stations					☐	☐	☐	☐	63. ___
(Performance Elements)									
(344) Establish criteria for evaluating the training station potential of a business	☐	☐	☐	☐					64. ___
(345) Identify prospective cooperating employers to provide on-the-job training stations	☐	☐	☐	☐					65. ___
(346) Establish criteria to evaluate qualifications of prospective on-the-job instructors	☐	☐	☐	☐					66. ___
(347) Assess training capability of the on-the-job instructor of the prospective training station	☐	☐	☐	☐					67. ___
(348) Assess educational adequacy of the prospective training stations facilities and equipment	☐	☐	☐	☐					68. ___
(349) Assess safety provisions of the facilities and equipment of the prospective training station	☐	☐	☐	☐					69. ___
(350) Convince an employer to provide a training station for cooperative occupational education	☐	☐	☐	☐					70. ___
(351) Arrange with a union to make contract provisions for student-learners	☐	☐	☐	☐					71. ___
( ) Others.....									72. ___
J-3. Developing a Training Plan and Agreement					☐	☐	☐	☐	73. ___
(Performance Elements)									
(352) Develop a training agreement between student-learners, their parents, the school, and the cooperating employer	☐	☐	☐	☐					74. ___
(353) Arrange school and work schedules with student-learners, school, and employers	☐	☐	☐	☐					75. ___
(353) Develop a systematic training plan with the cooperating employer and/or on-the-job instructor	☐	☐	☐	☐					76. ___
( ) Others.....									77. ___

PART C continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
					0 9 : (1)(2)(3)	(4)(5)	(6) :	(7) :	: (8)(9)
J-4. Complying With Government Employment Regulations ----------					☐	☐	☐	☐	10.___
(Performance Elements)									
(354) Aid student-learners in procuring work permits........	[ ]	[ ]	[ ]	[ ]					11.___
(355) Assist the cooperating employer in obtaining information concerning federal and state wage and hour classifications........	[ ]	[ ]	[ ]	[ ]					12.___
(356) Assist the cooperating employer in acquiring a federal permit to pay a training wage....	[ ]	[ ]	[ ]	[ ]					13.___
(357) Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation........	[ ]	[ ]	[ ]	[ ]					14.___
( ) Others.....									15.___
J-5. Supervising Student-Learner's On-The-Job Experience ----------					☐	☐	☐	☐	16.___
(Performance Elements)									
(358) Prepare the student-learner for an interview with the cooperating employer and training station personnel........	[ ]	[ ]	[ ]	[ ]					17.___
(359) Assist the student-learner in on-the-job training orientation........	[ ]	[ ]	[ ]	[ ]					18.___
(360) Assist the cooperating employer's personnel in accepting the training status and role of the student-learner........	[ ]	[ ]	[ ]	[ ]					19.___
(361) Maintain good working relationships with training station personnel........	[ ]	[ ]	[ ]	[ ]					20.___
(362) Develop a procedure to insure student's safety in the training station........	[ ]	[ ]	[ ]	[ ]					21.___
(363) Develop a plan for supervision of on-the-job training........	[ ]	[ ]	[ ]	[ ]					22.___
(364) Inform the administration of coordination itinerary........	[ ]	[ ]	[ ]	[ ]					23.___
(365) Assess the on-the-job experience daily reports with the student-learner to plan future instruction........	[ ]	[ ]	[ ]	[ ]					24.___
(366) Encourage the on-the-job instructor to follow the training plan in providing experiences for the student-learner........	[ ]	[ ]	[ ]	[ ]					25.___
(367) Maintain the student-learner's progress reports for on-the-job training and related instruction........	[ ]	[ ]	[ ]	[ ]					26.___
(368) Examine the student-learner's progress reports to determine future on-the-job training experiences and related instruction........	[ ]	[ ]	[ ]	[ ]					27.___
(369) Maintain a record of individual work hours, wages, and work experiences of on-the-job training........	[ ]	[ ]	[ ]	[ ]					28.___
(370) Assist the student-learner in the solution of problems related to on-the-job training...	[ ]	[ ]	[ ]	[ ]					29.___
(371) Control student-learner absenteeism from school and on-the-job training........	[ ]	[ ]	[ ]	[ ]					30.___
(372) Control the transfer of student-learners within the cooperative occupational education program and to other school programs........	[ ]	[ ]	[ ]	[ ]					31.___
(373) Conduct termination procedures for on-the-job training for the student-learner when conditions demand it........	[ ]	[ ]	[ ]	[ ]					32.___
(374) Sponsor an employer-employee appreciation event........	[ ]	[ ]	[ ]	[ ]					33.___
( ) Others.....									34.___

PART C continued	Column I IMPORTANCE LEVEL				Column II PERFORMANCE LEVEL				Office Use Only:
	Low	Below Av.	Above Av.	High	Low	Below Av.	Above Av.	High	
J-6. Evaluating the Student Learner's On-The-Job Performance (Performance Elements)					☐	☐	☐	☐	35.___
(375) Evaluate the student-learner's work qualities and habits on the job	☐	☐	☐	☐					36.___
(376) Evaluate the student-learner's personal traits and characteristics on the job	☐	☐	☐	☐					37.___
(377) Check the student-learner's progress in acquiring skills on the job	☐	☐	☐	☐					38.___
(378) Check the student-learner's progress with the on-the-job instructor and other training station personnel	☐	☐	☐	☐					39.___
(379) Assess the student-learner's performance with the assistance of the on-the-job instructor	☐	☐	☐	☐					40.___
( ) Others.....									41.___
J-7. Improving Related and On-The-Job Instruction (Performance Elements)					☐	☐	☐	☐	42.___
(380) Obtain suggestions from the on-the-job instructor to guide the selection of lessons for related instruction	☐	☐	☐	☐					43.___
(381) Evaluate the quality of the on-the-job training received by the student-learner	☐	☐	☐	☐					44.___
(382) Assist the on-the-job instructor with development of teaching techniques during supervisory visits to the training station	☐	☐	☐	☐					45.___
(383) Update related instruction for student-learners on the basis of information on technology obtained from cooperating employers	☐	☐	☐	☐					46.___
(384) Obtain information from the advisory committee on ways to improve related instruction and on-the-job training	☐	☐	☐	☐					47.___
( ) Others.....									48.___

APPENDIX F

RESPONDENTS TEACHING SPECIALTIES

Agriculture

Agriculture	7
Agricultural Mechanization	19
Animal Care	1
Conservation	30
Conservation/Horticulture	1
Farm Production & Management	13
Horticulture	16
Landscaping	4
Total	91

Business

Accounting	2
Bookkeeping	1
Business Education	7
Computer Programming	4
Computer Technology	1
Data Processing	42
General Office Services	14
Office Machines	4
Secretarial Practice	9
Typing	2
Total	86

Distributive Education

Distributive Education	18
Merchandising (Advertising)	3
Total	21

Health

Dental Assistant	8
Health Services	21
Home Nursing	1
Medical Assisting	3
Medical Careers	3
Nurse Assistant/Aide	11
Nursing Instructor	3
Practical Nursing (LPN)	62
Total	112

Home Economics

Adult Consumer Homemaking	1
Child Care	32
Clothing Services	2
Dressmaking	2
Home Aide	1
Home Economics	2
Home Health Services	1
Home Management	1
Housekeeping Services	1
Total	43

Trade and Industrial

Air Conditioning & Refrigeration	3
Appliance Repair	3
Auto Body Repair	10
Auto Mechanics	26
Auto Service	1
Aviation	3
Baking	1
Building Trades	7
Business Machine Repair	1
Carpentry	9
Commercial Art	2
Cooking	3
Cosmotology	20
Drafting	13
Drycleaning	1
Electricity	11
Electro-Mechanical Repair	1
Electronics	10
Equipment Repair	1
Food Service	4
Garment Design	2

Trade and Industrial (Continued)

Graphic Arts	1
Heating and Refrigeration	2
Lithography	1
Machine Shop	6
Machine Trades	2
Masonry	1
Photography	3
Plumbing	2
Printing	1
Radio and Television	2
Small Engine Repair	2
Welding	7
Total	162

APPENDIX G

IMPORTANCE AND PERFORMANCE LEVEL FOR CLUSTERS AND PERFORMANCE ELEMENTS SEGREGATED VIA SERVICE AREA TEACHER GROUPS INCLUDING WEIGHTED MEAN, F VALUE, AND DEGREES OF FREEDOM

TABLE XXII(H). UTILIZING TRADITIONAL EDUCATIONAL TECHNOLOGY

Category A. Executing (Implementing) Instruction (Clusters)	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-1. Utilizing Traditional Educational Technology-- (Performance Elements)	2.30	2.36	2.48	2.48	2.59	2.30	2.39	1.38	5/174	2.64	2.74	2.60	2.74	2.64	2.61	2.67	0.25	5/171
(21) Present information with filmstrips...........	2.52	2.31	2.50	2.79	2.74	2.41	2.54	1.41	5/171									
(22) Present information with slides...............	2.66	2.15	2.60	2.24	2.61	2.55	2.45	1.76	5/172									
(23) Present information with sound motion pictures.	2.86	2.74	3.00	3.10	3.44	2.82	2.97	2.64*	5/171									
(24) Present information with the overhead projector	2.55	3.07	2.80	2.76	2.62	3.02	2.83	1.57	5/169									
(25) Present information with the opaque projector..	1.86	1.96	2.11	2.08	2.05	2.12	2.04	0.32	5/164									
(26) Present information with the audio tape recorder....................................	1.93	2.37	2.70	2.29	2.46	1.80	2.15	3.15*	5/170									
(27) Present information with single concept films..	2.29	2.46	2.10	2.51	2.32	2.22	2.34	0.59	5/166									
(28) Present information with a record player.......	1.57	1.82	2.00	2.00	2.39	1.47	1.80	4.33*	5/172									

*Significant at the .05 level if the F Value > 2.28.

TABLE XXIII(H). UTILIZING INNOVATIVE EDUCATIONAL TECHNOLOGY

(Cluster)	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-2. Utilizing Innovative Educational Technology---- (Performance Elements)	1.82	2.31	2.50	2.20	2.16	2.11	2.14	1.56	5/165	1.82	2.04	2.11	1.64	1.47	2.26	1.92	3.58*	5/158
(29) Present information with educational television....................................	1.96	2.12	2.70	2.46	2.36	2.10	2.23	1.44	5/165									
(30) Present info with a video recorder/closed circuit television...........................	1.96	2.42	3.20	2.57	2.59	2.51	2.47	2.46*	5/163									
(31) Present information with a tele-speaker (telephone amplifier).........................	1.59	1.89	2.20	1.78	1.77	1.67	1.76	0.96	5/164									
(32) Direct teaching machine programmed instruction.	1.78	2.81	1.90	2.00	1.91	2.12	2.11	3.29*	5/165									

*Significant at the .05 level if the F Value > 2.28.

TABLE XXIV(H). UTILIZING VISUAL AIDS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
(Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-3. Utilizing Visual Aids—	2.83	2.76	3.03	2.95	3.03	2.88	2.90	1.10	5/174	3.03	3.15	3.20	3.15	3.09	3.29	3.17	0.82	5/171
(Performance Elements)																		
(33) Present information with bulletin boards.......	2.76	2.85	2.90	2.92	3.09	2.69	2.84	0.85	5/173									
(34) Present information with exhibits.............	2.57	2.89	3.20	2.77	3.22	3.12	2.94	2.75*	5/172									
(35) Present information with the aid of a flannel board................................	1.82	1.59	2.30	2.05	2.65	1.72	1.95	4.96*	5/166									
(36) Present information with the aid of a flip chart..	2.39	2.15	2.50	2.92	2.57	2.49	2.53	2.85*	5/169									
(37) Present information with the aid of a chalk board.................................	3.45	3.42	3.50	3.33	3.13	3.33	3.35	0.67	5/173									
(38) Illustrate with models and real objects........	3.82	3.69	3.80	3.67	3.52	3.75	3.71	1.00	5/172									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XXV(H). EMPLOYING GROUP INTERACTION TECHNIQUES

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
(Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-4. Employing Group Interaction Techniques—	2.25	2.44	2.96	2.68	2.85	2.39	2.53	3.58*	5/172	**2.57**	**2.74**	**3.00**	**2.76**	**3.14**	**2.65**	**2.76**	**1.52**	**5/168**
(Performance Elements)																		
(39) Conduct buzz groups	2.32	2.36	3.00	2.74	3.09	2.22	2.53	3.15*	5/167									
(40) Conduct symposiums	1.70	2.00	2.70	2.11	2.14	1.98	2.03	2.05	5/166									
(41) Conduct panel discussions	2.11	2.23	3.00	2.59	2.87	2.33	2.45	2.95*	5/169									
(42) Employ question box technique	1.89	2.04	2.33	2.24	2.32	1.94	2.08	0.99	5/163									
(43) Conduct brainstorming sessions	2.26	2.52	3.30	2.40	3.04	2.56	2.58	2.88*	5/167									
(44) Lead group discussions	2.79	3.04	3.00	3.26	3.39	3.02	3.09	1.61	5/170									
(45) Employ role playing techniques	2.54	2.52	3.30	3.36	3.00	2.48	2.81	4.99*	5/169									

***Significant at the .05 level if the F Value ≥ 2.28.**

TABLE XXVI(H). EMPLOYING TEACHER-CENTERED METHODS OF PRESENTATION

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
(Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-5. Employing Teacher-Centered Methods of Presentation—	3.15	3.22	3.11	3.21	3.20	3.13	3.17	0.34	5/174	**3.31**	**3.22**	**2.80**	**3.41**	**3.27**	**3.37**	**3.30**	**1.78**	**5/171**
(Performance Elements)																		
(46) Demonstrate a manipulative skill	3.62	3.62	3.50	3.67	3.70	3.71	3.66	0.28	5/173									
(47) Present a concept or principle through a demonstration	3.59	3.63	3.90	3.69	3.83	3.68	3.69	1.14	5/172									
(48) Give a lecture	2.69	2.63	2.30	2.92	2.57	2.67	2.69	1.09	5/173									
(49) Give an illustrated talk	3.29	3.15	3.30	3.26	3.14	3.26	3.23	0.25	5/171									
(50) Present information with analogies	3.00	3.04	3.00	2.97	3.00	2.78	2.94	0.46	5/167									
(51) Present information through individualized instruction	3.57	3.82	3.60	3.10	3.39	3.43	3.44	3.27*	5/172									
(52) Present information through team teaching	3.00	2.78	2.60	3.13	3.17	2.57	2.88	2.62*	5/170									
(53) Give an assignment	2.46	3.11	2.70	2.95	2.78	2.82	2.83	1.89	5/172									

***Significant at the .05 level if the F Value ≥ 2.28.**

TABLE XXVII(II). APPLYING BASIC INSTRUCTIONAL STRATEGIES

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
(Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-6. Applying Basic Instructional Strategies— (Performance Elements)	3.01	3.28	3.24	3.11	3.37	3.08	3.15	2.30*	5/174	3.03	3.42	2.88	3.08	3.23	3.12	3.15	1.66	5/167
(54) Conduct group supervised study................	2.56	2.96	3.00	2.44	2.91	2.43	2.63	2.63*	5/170									
(55) Present information through case-study problems................................	2.72	3.15	3.44	3.03	3.13	2.65	2.92	2.92*	5/172									
(56) Introduce a lesson............................	2.93	3.30	2.90	3.23	3.22	3.04	3.12	1.27	5/172									
(57) Obtain summary for a lesson..................	2.69	3.00	3.33	3.26	3.09	2.88	3.00	1.94	5/170									
(58) Employ oral questioning techniques............	3.21	3.22	3.30	3.33	3.44	3.52	3.36	1.29	5/174									
(59) Acknowledge student verbal and non-verbal cues.	3.11	3.37	3.10	3.36	3.61	3.20	2.29	1.62	5/172									
(60) Enrich instruction to challenge ability of more able students...........................	3.17	3.82	3.00	3.39	3.78	3.17	3.38	5.39*	5/174									
(61) Reinforce learning...........................	3.36	3.48	3.50	3.41	3.83	3.41	3.47	1.61	5/172									
(62) Provide remedial work for slower students......	3.07	3.33	3.50	2.95	3.52	3.20	3.20	2.01	5/171									
(63) Employ reward techniques......................	2.93	3.15	3.10	2.51	3.00	3.06	2.93	2.28*	5/172									
(64) Establish frames of reference to enable students to understand a situation from several points ov view.........................	3.19	3.33	3.55	3.40	3.59	3.29	3.36	1.25	5/164									
(65) Apply non-verbal techniques (gestures, silence, etc.)................................	2.82	3.04	3.44	2.97	3.32	2.88	3.00	1.29	5/167									
(66) Direct students in applying problem solving techniques.................................	3.32	3.48	3.63	3.26	3.41	3.44	3.39	0.60	5/169									

*Significant at the .05 level if the F Value $\geq$ 2.28.

TABLE XXVIII(H). UTILIZING COMMUNITY RESOURCES

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
(Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-7. Utilizing Community Resources	2.96	2.89	3.37	3.06	3.41	2.68	2.97	4.96*	5/173	2.89	2.74	2.90	2.84	3.00	2.43	2.74	2.20	5/167
(Performance Elements)																		
(67) Present information with the assistance of a resource person	2.96	2.77	3.20	3.08	3.48	2.62	2.94	4.05*	5/171									
(68) Direct students in gathering information from sources in the community	2.64	2.85	3.30	3.00	3.17	2.49	2.82	3.76*	5/172									
(69) Conduct field trips	3.29	3.04	3.60	3.10	3.57	2.86	3.14	3.47*	5/172									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XXIX(H). DIRECTING INSTRUCTION BY STUDENTS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
(Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-8. Directing Instruction by Students	2.98	3.09	3.05	2.76	3.20	2.87	2.95	1.46	5/173	2.69	3.04	2.60	2.77	2.67	2.72	2.76	0.82	5/165
(Performance Elements)																		
(70) Direct students in instructing other students	3.10	3.33	3.00	2.82	3.35	3.02	3.08	1.97	5/173									
(71) Direct student presentations	2.86	2.85	3.10	2.71	3.04	2.71	2.82	0.86	5/173									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XXX(II). DIRECTING LABORATORY INSTRUCTION

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
(Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-9. Directing Laboratory Instruction	3.38	3.49	3.47	3.28	3.38	3.12	3.30	1.90	5/171	3.07	3.33	3.11	3.23	3.00	3.21	3.18	0.84	5/167
(Performance Elements)																		
(72) Direct student laboratory experience	3.54	3.48	3.22	3.06	3.65	3.27	3.47	1.87	5/170									
(73) Direct students in preparing laboratory work or job plans	3.39	3.37	3.44	3.43	3.48	3.02	3.31	2.18	5/171									
(74) Guide student progress through the use of operation and/or job sheets	3.19	3.46	3.44	3.23	3.22	3.10	3.23	0.93	5/169									
(75) Present information by the project method	3.41	3.64	3.78	2.88	3.00	3.12	3.20	4.89*	5/168									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XXXI(II). DIRECTING INDEPENDENT STUDY

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
(Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
A-10. Directing Independent Study	2.74	3.09	2.48	2.85	2.64	2.82	2.81	1.78	5/171	2.63	3.00	2.50	2.73	2.40	2.51	2.64	2.41*	5/164
(Performance Elements)																		
(76) Direct student study of information and assignment sheets	3.07	3.19	2.78	2.95	2.87	2.88	2.97	0.90	5/171									
(77) Direct student study of textbooks, bulletins, and pamphlets	2.96	3.19	2.22	3.05	2.74	3.02	2.97	2.65*	5/171									
(78) Direct written programmed instruction	2.19	2.89	2.44	2.54	2.30	2.55	2.51	1.88	5/170									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XXXII(H). PROJECTING INSTRUCTIONAL RESOURCE NEEDS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
Category B. Management (Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-1. Projecting Instructional Resource Needs (Performance Elements)	3.13	3.46	3.33	3.40	3.52	3.45	3.39	1.51	5/172	2.86	3.37	3.10	3.00	3.23	3.26	3.14	1.86	5/1
(79) Compile a list of supplies needed for the academic year	3.26	3.56	3.30	3.44	3.61	3.43	3.44	0.88	5/171									
(80) Identify new tools and/or equipment needed for the academic year	3.29	3.52	3.40	3.36	3.65	3.57	3.47	1.47	5/172									
(81) Recommend reference books and periodicals for acquisition by the library	2.86	3.27	3.30	3.41	3.30	3.35	3.27	1.90	5/171									

*Significant at the .05 level if the F Value > 2.28.

TABLE XXXIII(H). PREPARING AN ANNUAL BUDGET

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-2. Preparing an Annual Budget (Performance Elements)	3.17	2.94	3.27	2.54	3.15	3.00	2.95	3.17*	5/169	2.96	2.78	3.00	2.30	2.71	2.96	2.76	2.69*	5/167
(82) Prepare a capital outlay budget proposal for new equipment	3.21	3.04	3.50	2.71	3.14	3.24	3.09	2.45*	5/169									
(83) Plan an operating budget proposal for consumable supplies, services, and instructional materials	3.25	3.00	3.50	2.71	3.32	3.26	3.12	3.07*	5/169									
(84) Prepare a budget for estimating travel expenses incurred in occupational activities	3.00	2.85	2.80	2.18	3.00	2.46	2.63	3.62*	5/165									

*Significant at the .05 level if the F Value > 2.28.

TABLE XXXIV(H). PROCURING SUPPLIES AND FACILITIES

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-3. Procuring Supplies and Facilities (Performance Elements)	3.04	2.79	3.32	2.58	2.83	3.01	2.88	2.97*	5/171	2.93	3.04	3.20	2.32	2.68	3.00	2.82	4.39*	5/169
(85) Accept gifts or donations of supplies and equipment for the occupational education program in accordance with school policy	3.22	2.96	3.10	2.47	3.00	3.10	2.95	2.43*	5/167									
(86) Prepare purchase requests for approved occupational equipment and supplies	3.21	3.48	3.50	3.08	3.48	3.33	3.31	1.64	5/171									
(87) Arrange for additional occupational facilities to accommodate expanded enrollments and technological advancements	2.89	2.63	3.50	2.76	2.74	2.82	2.82	1.08	5/168									
(88) Design a procedure for acquiring needed consumable supplies and materials	3.26	2.63	3.40	2.37	2.83	3.14	2.89	5.11*	5/170									
(89) Devise a system for determining and collecting student fees for consumable supplies	2.74	2.15	3.10	2.18	2.09	2.63	2.43	3.14*	5/169									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XXXV(H). MAINTAINING RECORDS AND FILES

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-4. Maintaining Records and Files (Performance Elements)	3.09	3.10	2.98	3.07	3.35	3.10	3.12	0.80	5/173	2.79	3.07	2.80	3.03	3.00	3.06	2.99	0.70	5/170
(90) Structure a filing system for records and report forms	2.96	3.22	2.90	3.05	3.44	3.24	3.16	1.28	5/170									
(91) Supply the data for occupational reports required by the state department of education	2.93	2.82	2.90	2.77	2.96	2.80	2.84	0.22	5/172									
(92) Devise a filing system for instructional materials	3.45	3.41	3.00	3.05	3.52	3.37	3.32	2.17	5/172									
(93) Devise a system for maintaining occupational opportunity information for use by occupational students	3.11	2.84	3.20	3.08	3.48	3.13	3.12	1.30	5/164									
(94) Assemble student files documenting personal characteristics, attitudes, and grades	2.93	3.15	3.00	3.43	3.36	3.02	3.16	1.69	5/167									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XXXVI(H). ASSURING LABORATORY SAFETY

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-5. Assuring Laboratory Safety——— (Performance Elements)	3.54	3.13	3.10	3.29	3.29	3.59	3.38	2.23	5/172	3.48	3.19	2.89	3.40	2.91	3.38	3.29	2.23	5/166
(95) Provide approved safety apparel and devices for occupational students assigned to hazardous equipment..........	3.83	3.04	3.20	3.21	3.00	3.74	3.40	4.71*	5/170									
(96) Establish a procedure for attending to the first aid needs of students..........	3.45	3.30	3.10	3.40	3.57	3.61	3.46	1.17	5/172									
(97) Maintain a record of safety instruction presented in compliance with safety laws..........	3.35	3.04	3.00	3.31	3.30	3.43	3.29	1.04	5/171									

*Significant at the .05 level if the F Value > 2.28.

TABLE XXXVII(H). ESTABLISHING ACCEPTABLE STUDENT BEHAVIOR

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-6. Establishing Acceptable Student Behavior——— (Performance Elements)	3.49	3.62	3.37	3.51	3.67	3.55	3.55	0.94	5/174	3.55	3.63	3.10	3.42	3.41	3.46	3.47	1.44	5/170
(98) Uphold school standards of expected student behavior..........	3.41	3.41	3.20	3.53	3.44	3.51	3.46	0.56	5/174									
(99) Formulate with students acceptable standards of behavior in occupational classrooms and labs	3.48	3.59	3.30	3.49	3.70	3.31	3.47	1.24	5/173									
(100) Uphold acceptable standards of student behavior in occupational classrooms and labs..........	3.59	3.63	3.40	3.62	3.74	3.69	3.64	0.82	5/171									
(101) Carry out approved disciplinary action when warrented..........	3.45	3.59	3.30	3.41	3.74	3.54	3.52	1.23	5/172									
(102) Encourage students to exercise self discipline.	3.55	3.85	3.60	3.74	3.87	3.69	3.72	1.83	5/171									
(103) Control outbursts of fighting and aggressive behavior..........	3.45	3.63	3.40	3.45	3.52	3.69	3.55	1.04	5/170									

*Significant at the .05 level if the F Value > 2.28.

TABLE XXXVIII(H). MANAGING THE LABORATORY

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
B-7. Managing the Laboratory— (Performance Elements)	3.40	3.31	3.23	3.12	3.40	3.38	3.31	1.63	5/172	3.35	3.33	2.78	3.05	3.36	3.17	3.20	1.94	5/167
(104) Maintain an inventory of occupational tools, supplies, and equipment......................	3.48	3.37	3.11	3.15	3.57	3.58	3.41	2.41*	5/172									
(105) Establish a system for repairing and servicing tools and equipment in the laboratory.........	3.35	3.26	2.67	2.80	3.13	3.42	3.17	3.87*	5/172									
(106) Arrange for the storage and security of supplies and equipment.......................	3.52	3.41	3.22	3.13	3.48	3.58	3.41	2.22	5/171									
(107) Implement student check-out procedures for tools, supplies, and equipment used in the lab	3.14	2.82	2.89	2.90	3.30	3.33	3.10	1.99	5/170									
(108) Direct students in a system for cleaning and maintaining the laboratory..................	3.52	3.22	3.22	3.20	3.74	3.56	3.43	3.28*	5/172									
(109) Schedule laboratory equipment for maximum utilization by students......................	3.48	3.56	3.67	3.23	3.57	3.32	3.41	1.40	5/172									
(110) Arrange layout of the occupational laboratory to simulate the occupational environment......	3.45	3.56	3.78	3.48	3.74	3.60	3.56	0.99	5/172									
(111) Arrange laboratory work areas and storage space to facilitate student performance.......	3.59	3.52	3.63	3.39	3.44	3.49	3.49	0.38	5/169									
(112) Control heat, light, and ventilation in occupational laboratories and classrooms......	3.28	3.30	3.11	3.24	3.33	3.22	3.25	0.12	5/167									
(113) Establish a policy for use of the physical facilities and equipment by other school personnel and outside groups.................	3.21	3.07	3.00	2.67	2.68	2.68	2.85	1.84	5/163									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XXXIX(H). PLANNING SCHOOL-COMMUNITY RELATIONS ACTIVITIES

Category C. School-Community Relations (Cluster)	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-1. Planning School-Community Relations Activities (Performance Element)	2.93	2.93	3.33	2.85	3.33	2.64	2.90	3.24*	5/172	2.45	2.63	2.50	2.41	2.62	2.18	2.41	1.15	5/168
(114) Assist in the development of policies regarding school-community relations...........	2.75	2.70	3.20	2.77	3.09	2.63	2.78	1.33	5/171									
(115) Plan school-community relations activities for the occupational education program.......	2.93	3.00	3.40	2.90	3.41	2.69	2.95	2.82*	5/171									
(116) Procure school administration clearance to conduct school-community relations activities	3.10	3.07	3.40	2.87	3.50	2.61	2.97	4.05*	5/172									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XL(H). PUBLICIZING OCCUPATIONAL EDUCATION AND THE SCHOOL'S OCCUPATIONAL PROGRAM

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-2. Publicizing Occupational Education and the School's Occupational Program (Performance Elements)	2.77	2.87	3.40	2.76	2.96	2.89	2.88	1.18	5/171	2.44	2.63	3.00	2.26	2.38	2.62	2.51	1.48	5/167
(117) Provide brochures to inform the school and community of the occupational program.........	2.89	2.96	3.60	2.95	2.86	3.14	3.02	1.13	5/169									
(118) Provide displays in the school and community on the occupational education program.........	2.93	3.00	3.60	3.03	3.18	3.14	3.09	1.06	5/170									
(119) Prepare news releases and manuscripts on activities of the occupational program........	2.96	2.96	3.40	2.76	3.05	2.84	2.92	0.84	5/169									
(120) Speak to school and community groups on the occupational program.........................	2.96	3.04	3.60	2.95	3.27	3.04	3.07	1.12	5/169									
(121) Present activities of the occupational program on radio....................................	2.19	2.52	3.10	2.31	2.64	2.50	2.46	1.50	5/169									
(122) Present activities of the occupational program on television...........................	2.30	2.48	3.00	2.37	2.68	2.60	2.52	0.95	5/168									
(123) Direct student presentations describing activities of the occupational program........	2.89	3.11	3.50	2.97	3.05	2.98	3.02	0.70	5/167									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XLI(H). MAINTAINING GOOD SCHOOL-COMMUNITY RELATIONS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-3. Maintaining Good School-Community Relations---- (Performance Elements)	2.93	2.98	3.31	2.83	3.07	2.91	2.95	1.15	5/175	2.79	3.04	3.00	2.68	2.91	2.80	2.83	0.66	5/169
(124) Conduct an open house to familiarize members of the school and community with activities of the occupational education program.........	3.66	3.52	3.80	3.40	3.61	3.54	3.55	0.85	5/175									
(125) Sponsor student-parent activities for the occupational education program................	2.72	3.00	3.30	2.74	3.13	2.88	2.90	1.09	5/171									
(126) Assist with special community social events...	2.71	2.26	3.20	2.46	2.65	2.43	2.53	2.08	5/172									
(127) Assist with community business and industry sponsored activities..........................	3.00	3.04	3.50	2.56	2.78	2.88	2.87	2.22	5/168									
(128) Serve in professional non-occupational organizations to improve the image of the occupational education program.....................	2.75	2.82	3.22	2.87	3.09	2.84	2.88	0.64	5/169									
(129) Serve in community civic, service, or social organizations to improve the image of the occupational education program................	2.83	2.82	3.30	2.87	3.13	2.65	2.85	1.35	5/170									
(130) Provide consultant services to local businesses and industry.......................	2.59	2.85	2.90	2.45	2.87	2.74	2.70	1.01	5/169									
(131) Maintain liaison with union officials and employers..................................	2.82	2.96	3.20	2.59	2.70	3.12	2.88	1.68	5/171									
(132) Maintain liaison with employment agencies.....	2.75	3.00	3.20	2.95	3.09	2.88	2.94	0.55	5/170									
(133) Maintain liaison with community professional, service, fraternal, social, and religious organizations................................	2.86	2.96	3.10	2.92	3.13	2.68	2.89	1.02	5/170									
(134) Maintain good relations with other schools....	3.26	3.58	3.70	3.17	3.61	3.34	3.39	1.81	5/165									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XLII(H). OBTAINING SCHOOL-COMMUNITY FEEDBACK ON THE OCCUPATIONAL PROGRAM

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-4. Obtaining School-Community Feedback on the Occupational Program........................	3.01	2.90	2.90	2.81	3.00	2.83	2.89	0.51	5/173	2.89	2.89	2.11	2.40	2.50	2.48	2.58	2.65*	5/168
(Performance Elements)																		
(135) Obtain informal feedback through contacts with individuals in the school and community.......	3.25	3.44	3.00	3.08	3.17	2.94	3.13	1.71	5/172									
(136) Conduct opinion surveys in the school and community concerning the occupational program.	2.52	2.67	2.80	2.54	2.61	2.73	2.63	0.30	5/171									
(137) Analyze enrollment trends to determine student and parent acceptance of the occupational program..................................	3.11	2.96	3.10	2.95	2.83	2.82	2.93	0.43	5/171									
(138) Obtain information from parents concerning their expectations of the occupational program	3.04	2.78	3.00	2.77	2.74	2.98	2.88	0.73	5/169									
(139) Consult the advisory committee to obtain information concerning their expectations of the occupational education program...........	3.46	3.15	3.20	3.11	3.52	3.06	3.22	1.92	5/168									
(140) Study community voting results on financial issues affecting the occupational program.....	2.93	2.70	2.60	2.58	3.09	2.67	2.75	1.40	5/164									
(141) Acquire information from members of the community power structure (political, social, and economic pressure groups) regarding their expectations of the occupational program......	2.72	2.63	2.60	2.63	3.00	2.67	2.70	0.62	5/165									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XLIII(H). MAINTAINING GOOD INTRA-SCHOOL RELATIONSHIPS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
C-5. Maintaining Good Intra-School Relationships—	3.37	3.41	3.35	3.55	3.60	3.45	3.46	1.21	5/171	3.22	3.39	3.00	3.36	3.50	3.22	3.30	0.95	5/165
(Performance Elements)																		
(142) Express a philosophy consistent with that of the occupational staff........................	2.89	3.15	3.10	3.46	3.30	3.24	3.22	2.29*	5/170									
(143) Maintain good working relationships with the school administration and faculty............	3.61	3.70	3.70	3.64	3.74	3.66	3.67	0.22	5/171									
(144) Assist in planning the goals of the total school program..............................	3.26	3.19	3.00	3.49	3.61	3.30	3.34	1.57	5/170									
(145) Maintain good working relationships with the school supporting staff......................	3.43	3.59	3.60	3.59	3.74	3.61	3.59	0.70	5/170									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XLIV(H). STRUCTURING/DESIGNING A COURSE

Category D. Planning Instruction (Cluster)	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
D-1. Structuring/Designing a Course— (Performance Elements)	3.06	3.10	3.33	3.24	3.51	3.07	3.17	5.52*	5/189	**2.94**	**2.94**	**2.90**	**3.16**	**2.91**	**3.19**	**3.05**	**1.35**	**5/186**
(146) Review general program objectives	3.24	3.19	3.30	3.45	3.64	3.25	3.32	1.86	5/189									
(147) Review student performance objectives	3.32	3.16	3.40	3.42	3.64	3.25	3.33	2.27	5/189									
(148) Sequence student performance objectives for a course	2.77	3.07	3.40	3.13	3.64	2.83	3.04	5.62*	5/189									
(149) Involve students in planning a unit	2.47	2.13	3.10	2.46	3.14	2.37	2.49	4.36*	5/188									
(150) Determine student needs and interest	3.44	3.45	3.50	3.18	3.68	3.30	3.38	1.89	5/189									
(151) Select student performance objectives for a unit	3.00	3.03	3.20	3.26	3.14	3.04	3.09	0.82	5/186									
(152) Write content outline for a unit	2.76	2.80	3.00	3.24	3.32	3.08	3.04	2.63*	5/186									
(153) Correlate unit content with on-the-job and/or laboratory experiences	3.35	3.74	3.60	3.66	3.85	3.57	3.61	2.25	5/183									
(154) Determine group and individual learning experiences based on individual differences of students	3.12	3.16	3.40	3.08	3.75	2.93	3.14	3.54*	5/184									
(155) Select methods of evaluating students' performance throughout a unit	3.16	3.27	3.40	3.50	3.43	3.14	3.28	1.84	5/183									

***Significant at the .05 level if the F Value ≥ 2.28.**

TABLE XLV(H). PLANNING A LESSON

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
D-2. Planning a Lesson— (Performance Element)	3.00	3.06	3.30	3.36	3.54	3.08	3.18	6.88*	5/189	**2.56**	**3.03**	**2.80**	**3.27**	**3.14**	**2.95**	**2.97**	**4.88***	**5/187**
(156) Identify student performance objectives	3.03	3.13	3.30	3.21	3.41	3.10	3.16	0.98	5/189									
(157) Selecting teaching techniques	3.06	3.07	3.50	3.30	3.68	3.12	3.22	3.75*	5/187									
(158) Plan the introduction of a lesson	2.79	3.00	3.30	3.24	3.55	2.93	3.07	3.73*	5/188									
(159) Plan the content of a lesson	3.21	3.19	3.60	3.45	3.73	3.34	3.37	3.05*	5/188									
(160) Plan the summary of a lesson	2.79	2.90	3.30	3.47	3.68	2.97	3.12	7.56*	5/189									
(161) Plan student learning experiences	3.35	3.42	3.60	3.55	3.82	3.37	3.47	2.13	5/188									
(162) Select methods of evaluating students' attainment of specific performance objectives.	3.15	3.23	3.44	3.45	3.64	3.10	3.28	3.23*	5/187									
(163) Write a lesson plan	2.61	2.55	2.50	3.24	2.82	2.72	2.77	2.73*	5/188									

***Significant at the .05 level if the F Value ≥ 2.28.**

TABLE XLVI(H). SELECTING INSTRUCTIONAL RESOURCES

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
D-3. Selecting Instructional Resources—— (Performance Elements)	3.33	3.36	3.33	3.42	3.52	3.47	3.41	0.59	5/188	2.88	3.10	3.22	3.08	3.50	3.03	3.09	2.12	5/185
(164) Obtain textbooks, reference, and other instructional materials........................	3.24	3.36	3.30	3.41	3.55	3.31	3.35	0.67	5/187									
(165) Select tools and equipment for a lesson.......	3.46	3.48	3.50	3.51	3.46	3.59	3.52	0.35	5/186									
(166) Assemble consumable supplies for instructional purposes..................................	3.32	3.23	3.20	3.40	3.55	3.52	3.40	1.29	5/187									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XLVII(H). DEVELOPING INSTRUCTIONAL MATERIALS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
D-4. Developing Instructional Materials—— (Performance Elements)	2.53	2.76	2.91	2.76	2.88	2.50	2.66	2.80*	5/189	2.53	3.03	3.00	2.92	3.00	2.97	2.89	1.65	5/183
(167) Develop instructional materials (ex. transparencies, charts, assignment sheets, etc.)....	2.91	3.13	3.10	3.46	3.18	3.12	3.16	1.79	5/188									
(168) Prepare instructional materials with a spirit duplicator..................................	2.79	2.77	3.10	2.84	3.05	2.57	2.77	1.42	5/187									
(169) Prepare instructional materials with a stencil duplicator...........................	2.00	2.73	2.56	2.51	2.48	2.00	2.30	4.45*	5/183									
(170) Prepare instructional materials with a photocopier..................................	2.42	2.47	2.89	2.53	2.50	2.50	2.51	0.37	5/184									
(171) Involve students in the preparation of instructional materials.......................	2.44	2.71	3.00	2.49	3.14	2.33	2.57	2.94*	5/187									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XLVIII(H). OBTAINING BACKGROUND INFORMATION ON STUDENTS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
Category E. Guidance (Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-1. Obtaining Background Information on Students..	2.43	2.25	2.50	2.67	2.67	2.15	2.39	4.21*	5/188	2.41	2.42	2.50	2.60	2.67	2.37	2.47	0.51	5/186
(Performance Elements)																		
(172) Determine students' background and involvement..................................	3.06	2.55	2.80	2.81	3.10	2.57	2.76	2.13	5/185									
(173) Analyze students' cumulative records.........	2.32	2.45	2.20	2.65	2.43	2.15	2.36	1.51	5/187									
(174) Maintain anecdotal records on students.......	2.53	2.42	2.50	3.41	2.91	2.30	2.65	8.94*	5/188									
(175) Determine relationships among students through sociometric techniques (eg. sociogram	1.94	1.80	2.40	1.97	2.32	1.85	1.96	1.91	5/187									
(176) Review students' autobiographies for information to aid in understanding the students..	2.65	2.16	2.70	3.03	2.91	2.20	2.54	5.70*	5/187									
(177) Assemble information for case study reports..	2.06	2.03	2.40	2.19	2.36	1.83	2.06	1.93	5/184									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE XLIX(H). PROMOTING CONSTRUCTIVE TEACHER-STUDENT RELATIONSHIPS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-2. Promoting Constructive Teacher-Student Relationships——	3.21	2.84	3.18	2.84	3.26	2.81	2,96	5.06*	5/188	3.09	3.16	3.20	3.19	3.46	3.19	3.20	0.70	5/185
(Performance Elements)																		
(178) Communicate with prospective and continuing students during the summer..................	2.94	2.14	2.90	2.45	2.52	2.25	2.46	3.14*	5/185									
(179) Maintain an open door policy for student consultation................................	3.58	3.65	3.60	3.62	3.77	3.45	3.58	1.21	5/187									
(180) Encourage students to discuss career aspirations.................................	3.64	3.68	3.70	3.54	3.82	3.60	3.64	0.81	5/187									
(181) Demonstrate personal concern for the student and his family...........................	3.30	3.16	3.50	3.19	3.82	3.13	3.28	3.01*	5/186									
(182) Conduct home visits.........................	2.58	1.52	2.20	1.60	2.32	1.62	1.87	8.14*	5/187									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE L(H). COUNSELING STUDENTS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-3. Counseling Students	2.80	2.73	3.10	3.02	3.08	2.69	2.84	3.51*	5/187	2.77	2.77	2.80	3.08	3.32	3.02	2.97	2.12	5/183
(Performance Elements)																		
(183) Recognize potential problems of students......	3.29	3.23	3.60	3.46	3.59	3.25	3.35	1.94	5/187									
(184) Conduct a conference for counseling a student.	2.68	2.48	3.60	3.22	3.27	2.62	2.85	7.29*	5/186									
(185) Conduct group counseling sessions............	2.41	2.07	2.60	2.32	2.91	1.97	2.27	4.18*	5/186									
(186) Confer with student and his parents regarding his educational development.................	2.94	2.61	2.90	2.84	2.82	2.75	2.80	0.58	5/184									
(187) Interpret occupational tests and inventories to students................................	2.55	2.82	2.60	2.83	2.73	2.43	2.63	1.17	5/183									
(188) Assist students in developing good study habits	2.91	3.10	3.30	3.44	3.18	3.13	3.16	1.99	5/184									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LI(H). INVOLVING GUIDANCE COUNSELORS IN ASSISTING STUDENTS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-4. Involving Guidance Counselors in Assisting Students..	2.96	3.06	3.38	3.24	3.38	2.91	3.08	2.73*	5/185	2.67	2.87	2.90	3.00	3.10	2.69	2.83	1.24	5/181
(Performance Elements)																		
(189) Establish communication patterns for exchanging information with the guidance staff..	3.27	3.32	3.70	3.39	3.41	3.02	3.26	2.40*	5/185									
(190) Supply guidance staff with performance data about students...............................	3.12	3.16	3.40	3.47	3.41	3.02	3.21	2.47*	5/185									
(191) Refer students to guidance staff and other specialists..................................	2.91	3.13	3.20	3.39	3.55	3.02	3.16	2.64*	5/185									
(192) Arrange for guidance counselors to administer and interpret personality, aptitude, and intelligence tests for specific students......	2.55	2.60	3.20	2.72	3.10	2.59	2.70	1.55	5/183									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LII(H). INVOLVING OTHER PERSONS AND AGENCIES IN ASSISTING STUDENTS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-5. Involving Other Persons and Agencies in Assisting Students——	2.72	2.77	2.98	2.73	3.11	2.55	2.74	2.52*	5/185	2.39	2.71	2.00	2.37	2.82	2.31	2.44	2.26	5/183
(Performance Elements)																		
(193) Assist students with their problems by working cooperatively with outside agencies (ex. health and welfare services)............	2.57	2.39	2.80	2.58	3.27	2.20	2.52	4.25*	5/185									
(194) Work with other teachers to help students with individual concerns......................	2.94	2.87	3.00	2.92	3.14	2.85	2.92	0.40	5/183									
(195) Refer students to qualified resource persons for occupational and educational information..	3.33	3.36	3.40	3.41	3.50	3.18	3.33	0.81	5/180									
(196) Arrange for the local office of the U.S. Employment Service to administer and interpret the General Aptitude Test Battery............	2.06	2.48	2.56	2.06	2.40	2.00	2.17	1.54	5/180									

*Significant at the .05 level if the F Value > 2.28.

TABLE LIII(H). ASSISTING STUDENTS IN PLANNING POST-SECONDARY EDUCATION AND/OR SECURING EMPLOYMENT

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment——————	3.28	3.57	3.60	3.40	3.44	3.42	3.43	1.11	5/185	3.03	3.23	3.00	3.29	3.36	3.16	3.19	0.80	5/182
(Performance Elements)																		
(197) Present information to students on occupational opportunities..........................	3.39	3.68	3.60	3.58	3.46	3.70	3.59	1.40	5/185									
(198) Present information to students on advanced training and educational opportunities available to them..................................	3.49	3.65	3.50	3.58	3.41	3.61	3.56	0.53	5/185									
(199) Assist students in determining ways to best describe their saleable skills...............	3.24	3.52	3.60	3.28	3.50	3.36	3.38	0.94	5/185									
(200) Assist graduating students in preparing for interviews with potential employers...........	3.21	3.65	3.80	3.44	3.55	3.44	3.47	1.59	5/185									
(201) Assist students in securing and completing applications for jobs, scholarships, educational loans, or college admission...........	2.94	3.42	3.80	3.11	3.09	3.10	3.16	2.23	5/185									
(202) Write letters of recommendation for students..	3.38	3.52	3.22	3.39	3.64	3.34	3.41	0.88	5/183									

*Significant at the .05 level if the F Value > 2.28.

TABLE LIV(H). ESTABLISHING A STUDENT OCCUPATIONAL ORGANIZATION

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
Category F. Student Occupational Organization (Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
F-1. Establishing a Student Occupational Organization—	2.63	2.53	2.94	2.48	2.31	2.32	2.47	1.34	5/177	2.03	1.97	2.70	1.88	1.50	2.04	1.98	2.38*	5/173
(Performance Elements)																		
(203) Obtain school administration approval for establishing a student occupational organization....................................	2.63	2.60	3.30	2.51	2.47	2.56	2.60	1.16	5/177									
(204) Contact state department personnel regarding the steps to follow in organizing a student occupational organization..................	2.53	2.48	3.10	2.46	2.24	2.22	2.41	1.78	5/176									
(205) Acquaint prospective members and their parent with the purposes, activities, and values of the student occupational organization.....	2.69	2.62	3.00	2.57	2.35	2.34	2.53	1.32	5/176									
(206) Organize a student committee to assess student interest in joining a student occupational organization....................	2.63	2.52	2.50	2.46	2.29	2.29	2.43	0.68	5/175									
(207) Assist in developing a constitution and bylaws for the student occupational organization................................	2.69	2.52	2.78	2.40	2.18	2.17	2.39	1.93	5/175									

*Significant at the .05 level if the F Value $\geq$ 2.28.

TABLE LV(H). ADVISING A STUDENT OCCUPATIONAL ORGANIZATION

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
F-2. Advising a Student Occupational Organization—(Performance Elements)	2.50	2.59	2.91	2.26	2.26	2.18	2.37	2.55*	5/175	2.16	1.90	2.50	1.85	1.40	1.98	1.96	2.10	5/170
(208) Conduct an organizational meeting for a student occupational organization	2.66	2.59	3.10	2.37	2.29	2.36	2.49	1.52	5/175									
(209) Direct initiation/installation activities of the student occupational organization	2.25	2.41	2.80	2.17	2.00	2.16	2.24	1.29	5/175									
(210) Orient students to the student occupational organization	2.72	2.86	3.10	2.46	2.44	2.36	2.57	1.92	5/175									
(211) Assist in the election and installation of officers	2.53	2.31	3.00	2.12	2.06	2.10	2.26	2.73*	5/173									
(212) Conduct leadership training sessions for the officers	2.72	2.45	2.80	2.20	2.18	2.18	2.36	2.05	5/173									
(213) Obtain assistance of state department personnel in maintaining the student occupational organization	2.38	2.48	3.10	2.29	2.18	2.09	2.30	2.51*	5/175									
(214) Assist students in developing a yearly program of work	2.75	2.90	3.00	2.40	2.59	2.19	2.53	3.81*	5/175									
(215) Assist students in advancing within the student occupational organization (degrees, rank)	2.47	2.66	3.00	2.29	3.18	2.12	2.35	2.81*	5/175									
(216) Supervise social and educational activities for the student occupational organization	2.63	2.64	3.10	2.40	2.29	2.17	2.43	2.80*	5/174									
(217) Involve elected chapter parents in the activities of the student occupational organ.	2.28	2.50	2.80	2.20	2.29	2.04	2.25	1.77	5/173									
(218) Assist students with publicizing student occupational organization activities	2.47	2.72	3.10	2.23	2.31	2.33	2.44	2.14	5/174									
(219) Assist students with financial management of the student occupational organization	2.58	2.61	2.90	2.09	2.29	2.19	2.35	2.59*	5/172									
(220) Assist students in planning and organizing fund-raising activities for the student occupational organization	2.53	2.69	3.00	2.29	2.29	2.30	2.44	1.66	5/173									
(221) Maintain a file of publications available for the student occupational organization	2.53	2.76	2.78	2.23	2.44	2.21	2.41	1.99	5/173									
(222) Supervise the development of an annual handbook and/or scrapbook for the student occupational organization	2.22	2.24	2.50	2.12	2.24	2.09	2.18	0.49	5/174									
(223) Maintain the student occupational organization program as an integral part of instruction	2.47	2.48	2.70	2.26	2.12	2.17	2.32	1.03	5/175									
(224) Evaluate the student occupational organization	2.28	2.66	2.80	2.24	2.24	2.09	2.30	2.03	5/172									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LVI(H). PARTICIPATING IN STATE AND NATIONAL STUDENT OCCUPATIONAL ORGANIZATION ACTIVITIES

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
F-3. Participating in State and National Student Occupational Organization Activities	2.52	2.59	2.77	2.43	2.36	2.35	2.46	0.62	5/176	2.12	1.79	2.70	1.89	1.63	2.00	1.97	1.93	5/174
(Performance Elements)																		
(225) Affiliate the student occupational organization with the state and national organization.	2.61	2.59	2.90	2.43	2.59	2.43	2.53	0.48	5/176									
(226) Assist in the preparation of state and national reports for the student occupational organization..............................	2.27	2.48	2.60	2.27	2.24	2.26	2.32	0.47	5/175									
(227) Provide advice and training for student entries in state and national student occupational organization contests................	2.61	2.79	2.90	2.57	2.41	2.52	2.60	0.58	5/176									
(228) Send student representatives to district, state, regional, and national student occupational organization activities...............	2.76	2.69	2.90	2.47	2.47	2.43	2.57	0.84	5/175									
(229) Assist in the development of rules and procedures for conducting district, state, regional, and national student occupational organization contests.........................	2.39	2.52	2.50	2.44	2.29	2.19	2.34	0.63	5/175									
(230) Participate in district,state, regional, and national activities of the student occupational organization..........................	2.49	2.66	2.80	2.43	2.35	2.28	2.44	0.92	5/176									
(231) Serve as an advisor or judge for district, state, regional, or national student occupational organization contests...............	2.52	2.41	2.80	2.34	2.18	2.31	2.39	0.70	5/176									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LVII(H). UPHOLDING THE PHILOSOPHY AND GOALS OF THE PROFESSION

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
Category G. Professional Role and Development (Cluster)	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
G-1. Upholding the Philosophy and Goals of the Profession—— (Performance Elements)	3.32	3.47	3.35	3.60	3.56	3.39	3.45	1.61	5/182	3.06	3.29	3.30	3.50	3.38	3.30	3.30	1.53	5/177
(232) Identify current trends of the teaching profession..............	3.18	3.52	3.20	3.54	3.67	3.27	3.38	2.92*	5/181									
(233) Promote the attainment of the goals of the teaching profession..............	3.30	3.42	3.20	3.50	3.44	3.28	3.36	0.82	5/182									
(234) Express a personal professional philosophy consistent with the goals of occupational education..............	3.39	3.33	3.40	3.56	3.39	3.38	3.41	0.50	5/181									
(235) Maintain the ethical standards expected of a professional educator..............	3.42	3.61	3.60	3.81	3.72	3.62	3.63	1.77	5/182									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LVIII(H). CONTRIBUTING PROFESSIONAL SERVICE

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
G-2. Contributing Professional Service—— (Performance Elements)	2.99	2.94	2.99	2.88	2.99	2.87	2.92	0.27	5/182	2.67	2.74	3.10	2.83	2.94	2.88	2.83	0.67	5/181
(236) Support professional organizations through membership and attendance at meetings..............	3.30	3.16	2.90	3.19	3.00	3.17	3.17	0.61	5/182									
(237) Serve professional organizations as an officer and/or chairman or committee member...	2.88	2.81	2.60	2.81	2.83	2.68	2.77	0.35	5/182									
(238) Represent the teaching profession as a committee member, delegate, or program participant at meetings and activities of other related professions..............	2.94	2.87	3.00	2.83	3.06	2.83	2.89	0.30	5/181									
(239) Participate in experimental and other data collecting research activities..............	2.76	2.74	3.20	2.53	3.06	2.78	2.77	1.58	5/182									
(240) Write an article for publication which contributes to the literature of the profession..	2.49	2.58	2.60	2.31	2.50	2.27	2.40	0.76	5/182									
(241) Assist in orienting teachers who are new to the school system..............	3.21	3.23	3.60	3.17	3.33	3.18	3.23	0.63	5/182									
(242) Work with a team from the school and/or community on pertinent school activities......	3.21	3.00	3.10	3.17	3.17	3.00	3.09	0.38	5/182									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LIX(H). ADVANCING ONE'S PROFESSIONAL COMPETENCIES

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
G-3. Advancing one's Professional Competencies (Performance Elements)	3.27	3.30	3.41	3.46	3.39	3.31	3.35	0.58	5/180	**2.94**	**3.21**	**3.50**	**3.26**	**3.16**	**3.20**	**3.18**	**1.30**	**5/175**
(244) Exchange observational visits, innovations, and ideas with others in the profession	3.38	3.47	3.40	3.47	3.53	3.44	3.45	0.13	5/180									
(245) Consult supervisory and administrative evaluations to determine attitudes of others toward one's personal and professional abilities and limitations	2.88	2.93	3.30	3.05	3.16	2.97	3.04	1.28	5/180									
(246) Use a self-analysis form to evaluate personal and professional abilities and limitations	2.94	2.93	2.70	2.89	3.16	2.95	2.94	0.45	5/177									
(247) Select the teaching position which is in keeping with personal and professional abilities	3.34	3.41	3.70	3.67	3.28	3.36	3.44	1.42	5/178									
(248) Maintainprofessional certification plus expand educational background and leadership potential through enrolling ingraduate, extension, and inservice education programs	3.44	3.33	3.80	3.50	3.42	3.37	3.43	0.79	5/180									
(249) Keep up-to-date through reading professional literature	3.38	3.48	3.40	3.71	3.58	3.50	3.53	1.02	5/175									
(250) Acquire new occupational skills and information needed to keep pace with technological advancement	3.66	3.63	3.80	3.75	3.74	3.66	3.69	0.32	5/180									
(251) Update professional personnel file regularly	3.16	3.24	3.10	3.42	3.26	3.31	3.28	0.61	5/179									

***Significant at the .05 level if the F Value $\geq$ 2.28.**

TABLE LX(H). SUPERVISING STUDENT TEACHERS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
G-4. Supervising Student Teachers—	3.24	3.01	3.33	3.09	3.24	2.95	3.08	1.27	5/166	2.05	1.88	2.13	2.16	2.27	2.24	2.13	0.52	5/145
(Performance Elements)																		
(252) Provide opportunities for potential teachers to observe and participate in the public school program	3.24	3.19	3.33	3.27	3.29	3.04	3.18	0.59	5/165									
(253) Interpret the policies and regulations of the local school district to the student teacher	3.03	2.85	3.22	2.82	2.94	2.83	2.90	0.64	5/166									
(254) Plan activities for the student teacher which draw upon and enrich college course work	3.14	2.77	3.11	2.77	3.00	2.70	2.85	1.41	5/166									
(255) Assign responsibilities commensurate with the student teacher's background of knowledge and experience	3.21	3.04	3.56	3.06	3.06	2.91	3.06	1.20	5/166									
(256) Demonstrate instructional techniques for student teachers	3.17	3.08	3.56	3.15	3.35	3.21	3.21	0.63	5/165									
(257) Consult regularly with the student teacher regarding planning, implementing, and evaluating teaching	3.41	3.15	3.56	3.21	3.53	3.07	3.24	1.65	5/166									
(258) Confer regularly with the student teacher regarding performance in the student teaching situation	3.38	2.96	3.22	3.27	3.53	3.07	3.20	1.71	5/166									
(259) Confer with the college supervisor and the student teacher regarding plans for and evaluation of the total student teaching experience	3.31	3.04	3.11	3.18	3.18	2.77	3.04	1.82	5/165									

*Significant at the .05 level if the F Value $\geq$ 2.28.

TABLE LXI(H). EVALUATING STUDENT PERFORMANCE

Category H. Evaluating Instruction (Cluster)	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-1. Evaluating Student Performance	3.28	3.17	3.15	3.18	3.13	3.15	3.18	0.51	5/163	3.11	3.11	3.30	3.17	3.25	3.26	3.19	0.49	5/164
(Performance Elements)																		
(260) Formulate a system of grading consistent with school policy	3.22	2.71	2.91	3.03	2.95	3.00	2.98	0.97	5/163									
(261) Establish criteria for student performance	3.37	3.57	3.27	3.54	3.50	3.31	3.43	1.23	5/164									
(262) Determine student's grade based on related instruction and lab or on-the-job experience	3.44	3.50	3.46	3.49	3.26	3.18	3.37	1.37	5/161									
(263) Appraise students products according to performance standards of the occupation	3.26	3.32	3.46	3.35	2.90	3.22	3.25	1.26	5/164									
(264) Appraise students performance in relation to student performance objectives	3.22	2.93	2.64	2.91	2.84	3.08	2.99	1.37	5/163									
(265) Evaluate individualized assignments completed under directed study	3.19	3.00	3.18	2.80	3.11	3.04	3.02	1.15	5/161									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXII(H). INVOLVING STUDENTS IN EVALUATION

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-2. Involving Students in Evaluation (Performance Elements)	2.95	2.84	2.70	2.75	2.94	2.68	2.79	1.25	5/164	2.54	2.43	2.70	2.76	2.80	2.45	2.58	1.31	5/158
(266) Devise self-evaluation techniques for use by students	2.89	3.04	2.64	2.63	2.85	2.64	2.77	1.14	5/164									
(267) Arrange for students to evaluate their own progress	3.15	2.89	2.82	2.57	2.65	2.51	2.72	2.70*	5/163									
(268) Engage in cooperative evaluation of achievement with students	3.27	3.00	2.90	3.06	3.20	2.89	3.04	0.99	5/160									
(269) Involve students in formulating procedures for their participation in instructional evaluation	2.50	2.57	2.20	2.63	3.10	2.58	2.62	1.99	5/163									
(270) Interpret student's evaluation of instruction	2.96	2.71	2.91	2.85	2.90	2.76	2.83	0.37	5/161									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXIII(H). FORMULATING TEST AND RATING SHEETS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-3. Formulating Test and Rating Sheets (Performance Elements)	2.80	2.57	2.41	2.83	2.62	2.70	2.69	1.99	5/165	2.70	2.74	2.90	3.09	2.85	2.96	2.89	1.25	5/158
(271) Formulate matching test items	2.73	2.46	2.09	2.91	2.55	2.72	2.66	1.99	5/164									
(272) Formulate completion test items	2.74	2.50	2.10	2.97	2.50	2.66	2.66	1.91	5/164									
(273) Formulate true-false test items	2.37	2.11	2.09	2.49	2.30	2.30	2.30	0.68	5/165									
(274) Formulate multiple-choice test items	2.93	2.57	2.09	3.56	2.70	3.18	2.99	8.20*	5/164									
(275) Formulate essay test items	2.37	1.82	2.00	1.91	2.45	1.83	2.02	2.10	5/158									
(276) Formulate test items for an oral exam	2.82	2.07	2.27	2.35	2.16	2.54	2.41	2.16	5/163									
(277) Devise laboratory performance rating sheets	3.30	3.44	3.27	3.21	3.20	3.04	3.21	0.87	5/163									
(278) Devise laboratory performance tests	3.19	3.57	3.36	3.15	3.05	3.27	3.26	1.27	5/163									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXIV(H). ADMINISTERING AND ANALYZING TESTS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-4. Administering and Analyzing Tests———— (Performance Elements)	2.82	2.91	2.75	3.06	2.85	2.83	2.89	0.91	5/165	2.41	2.70	2.80	2.65	2.85	2.71	2.67	1.28	5/160
(279) Analyze tests for reliability (consistency)...	2.82	2.79	2.82	3.06	2.90	2.96	2.91	0.56	5/164									
(280) Analyze tests for validity..................	3.00	3.00	2.64	3.14	2.65	2.92	2.94	1.44	5/164									
(281) Devise case study problems..................	2.62	2.82	2.36	2.89	2.80	2.38	2.65	1.85	5/161									
(282) Administer teacher made tests................	2.92	3.04	3.18	3.14	3.05	3.04	3.05	0.25	5/164									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXV(H). EVALUATING QUALITY OF INSTRUCTION

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
H-5. Evaluating Quality of Instruction———— (Performance Elements)	3.08	3.13	2.73	3.08	3.08	2.94	3.03	1.07	5/165	2.77	2.75	2.89	2.91	2.60	2.98	2.84	1.30	5/160
(283) Review student progress and/or achievement records to assess effectiveness of instruction	3.32	3.43	3.10	3.41	3.25	3.18	3.29	1.07	5/164									
(284) Obtain information from fellow teachers and supervisory personnel regarding the quality of one's instruction..........................	2.93	2.93	2.20	2.94	2.80	2.82	2.84	1.35	5/164									
(285) Seek opportunities for self-evaluation of instruction (video tape, audio tape, etc.)....	3.00	3.04	2.90	2.83	3.20	2.82	2.94	0.78	5/165									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXVI(H). PLANNING, CONDUCTING, AND UTILIZING A COMMUNITY SURVEY

Category I. Program Planning, Development and Evaluation	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
(Cluster)																		
I-1. Planning, Conducting, and Utilizing a Community Survey	2.97	2.89	2.83	2.62	2.69	2.73	2.77	1.07	5/162	2.14	2.04	2.44	2.29	1.95	2.48	2.25	1.42	5/156
(Performance Elements)																		
(286) Organize a steering committee to assist in pre-planning community survey activities.....	2.57	2.77	2.30	2.41	2.47	2.36	2.48	0.92	5/161									
(287) Identify the geographical area in which an occupational education survey will be conducted..................................	3.00	2.65	2.60	2.32	2.53	2.38	2.55	2.20	5/161									
(288) Obtain administrative approval for conducting a community survey.........................	3.25	2.50	2.33	2.40	2.44	2.50	2.59	3.07*	5/160									
(289) Solicit survey assistance of occupational education personnel from the state education department and/or university................	2.68	2.58	2.30	2.34	2.53	2.24	2.42	0.96	5/162									
(290) Adapt existing community survey materials to local needs................................	3.11	2.85	2.90	2.68	2.74	2.82	2.83	0.73	5/161									
(291) Consult the chamber of commerce to identify area employers to contact...................	2.64	3.04	2.90	2.29	3.00	2.66	2.69	2.49*	5/162									
(292) Consult the U.S. Employment Service to obtain information on manpower trends and needs.......................................	2.79	2.89	3.20	2.60	2.79	2.76	2.78	0.69	5/162									
(293) Persuade labor representatives to participate in the occupational education survey.........	2.89	2.77	3.00	2.32	2.53	2.96	2.74	2.16	5/161									
(294) Recruit teachers and guidance counselors to participate in conducting the occupational education survey............................	2.50	2.69	2.30	2.74	2.68	2.70	2.65	0.52	5/162									
(295) Establish communication with employer representatives who will be involved in the survey.....................................	3.25	3.27	3.10	2.83	2.83	3.10	3.07	1.26	5/161									
(296) Devise a plan of activities for the survey staff to follow............................	2.93	2.89	3.00	2.71	2.58	2.70	2.77	0.54	5/162									
(297) Publicize the purposes and objectives of the survey..................................	3.11	2.89	2.80	2.57	2.47	2.76	2.77	1.43	5/162									
(298) Orient the survey staff to their duties and responsibilities in collecting data..........	3.25	3.12	3.10	2.77	2.58	2.80	2.91	1.70	5/161									
(299) Collect data from employers to identify occupational education needs....................	3.54	3.39	3.10	3.17	3.11	3.16	3.25	0.89	5/161									
(300) Collect student occupational interest data to identify occupational education needs.....	3.04	2.92	3.20	2.69	3.00	2.82	2.89	0.82	5/162									
(301) Suggest an occupational education program based on an analysis of the occupational survey.......................................	3.11	3.00	3.00	2.97	2.79	3.02	2.99	0.27	5/161									
(302) Disseminate the findings of the community survey.......................................	2.89	2.92	3.00	2.69	2.53	2.65	2.75	0.74	5/158									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXVII(H). ORGANIZING AN ADVISORY COMMITTEE

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-2. Organizing an Advisory Committee (Performance Elements)	[illegible]32	2.99	3.08	2.83	2.80	2.84	2.95	2.48*	5/165	2.75	2.39	2.22	2.39	2.45	2.41	2.46	0.71	5/154
(303) Identify the role of the advisory committee.	3.59	3.27	3.00	3.03	3.15	2.98	3.16	2.33*	5/163									
(304) Establish criteria for selection of the advisory committee members	3.38	3.04	3.20	2.97	2.90	2.94	3.05	1.60	5/163									
(305) Obtain school board authorization for organizing the advisory committee	3.00	2.69	3.10	2.54	2.53	2.75	2.74	1.07	5/161									
(306) Obtain administrative approval of the selected advisory committee members	3.00	2.54	2.82	2.69	2.60	2.56	2.68	0.93	5/161									
(307) Publicize the establishment of the advisory committee, its members, and its functions	3.35	3.00	3.09	2.83	2.35	2.76	2.89	3.18*	5/162									
(308) Orient the advisory committee members to their role and function	3.59	3.39	3.36	2.94	3.20	3.11	3.23	2.37*	5/162									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXVIII(H). MAINTAINING AND UTILIZING AN ADVISORY COMMITTEE

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-3. Maintaining and Utilizing an Advisory Committee (Performance Elements)	3.31	3.19	3.13	2.78	2.91	2.88	3.00	3.39*	5/163	2.38	2.27	2.00	2.29	2.25	2.31	2.29	0.26	5/155
(309) Plan the agenda to be considered by the advisory committee	3.45	3.19	3.18	2.81	3.05	2.98	3.08	2.56*	5/163									
(310) Orient the advisory committee members to their role and function	3.59	3.35	3.27	2.86	3.10	3.11	3.18	2.87*	5/163									
(311) Invite resource persons to provide advisory committee consultation services	3.17	3.04	3.00	2.81	2.95	2.78	2.93	1.11	5/162									
(312) Serve as liaison for the advisory committee and school administration	3.14	3.20	3.09	2.75	2.80	2.77	2.92	1.89	5/162									
(313) Consult the advisory committee in planning an analysis of an occupation	3.41	3.42	2.91	2.81	2.70	2.83	3.01	4.11*	5/163									
(314) Consult the advisory committee in developing a long-range plan	3.41	3.23	3.36	2.89	3.05	2.83	3.07	2.62*	5/163									
(315) Involve the advisory committee in conducting a community occupational education survey	2.97	2.92	3.09	2.54	2.70	2.83	2.81	1.01	5/162									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXIX(H). PLANNING THE OCCUPATIONAL PROGRAM

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-4. Planning the Occupational Program—(Performance Elements)	3.27	3.32	3.26	3.24	3.22	3.11	3.22	0.70	5/166	**3.03**	**2.86**	**3.40**	**2.97**	**2.80**	**2.89**	**2.95**	**1.03**	**5/162**
(316) Assist in identification of occupational education purposes and objectives for the school	3.24	3.39	3.18	3.19	3.40	3.21	3.26	0.43	5/166									
(317) Determine the occupations for which training is to be offered	3.31	3.18	3.36	2.89	3.25	3.08	3.13	1.22	5/166									
(318) Analyze occupations with the assistance of employers and labor representatives	3.17	3.11	3.36	2.75	2.90	3.09	3.03	1.48	5/165									
(319) Identify the competencies needed for entry into an occupation	3.52	3.54	3.82	3.44	3.50	3.27	3.45	1.36	5/166									
(320) Describe the occupational standards of performance for each task in an occupation	3.28	3.32	3.27	3.44	3.30	2.96	3.23	2.06	5/165									
(321) Assist in writing general objectives for courses offered in the occupational program	3.28	3.32	2.91	3.25	3.05	3.06	3.17	0.93	5/166									
(322) Develop occupational courses by clustering and sequencing related tasks	3.22	3.26	3.46	3.22	3.15	3.04	3.19	0.63	5/162									
(323) Identify the skill, knowledge, and attitudes required for the performance of each occupational task included in a course	3.28	3.50	3.46	3.57	3.25	3.13	3.34	1.84	5/163									
(324) Write student performance objectives for the occupational education course	3.14	3.29	2.55	3.44	3.15	3.11	3.18	2.22	5/162									

***Significant at the .05 level if the F Value ≥ 2.28.**

TABLE LXX(H). PREPARING A LONG-RANGE OCCUPATIONAL PROGRAM

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-5. Preparing a Long-Range Occupational Program—(Performance Elements)	3.07	2.96	3.09	2.88	2.93	2.87	2.94	0.45	5/166	2.59	2.56	2.80	2.46	2.50	2.59	2.56	0.31	5/161
(325) Analyze long-range course needs for the occupational education program...............	3.10	3.15	3.36	3.03	3.10	2.98	3.08	0.52	5/166									
(326) Specify the long-range facility, equipment, and supply needs for the occupational program	3.17	3.19	3.27	3.00	3.04	3.00	3.08	0.52	5/165									
(327) Assist in the preparation of a long-range occupational budget........................	2.90	2.74	2.73	2.61	2.85	2.79	2.77	0.40	5/165									
(328) Identify the long-range needs for employing faculty for the occupational program.........	2.97	2.70	2.73	2.86	2.80	2.73	2.80	0.41	5/165									
(329) Assist in preparing the long-range program plan for occupational education.............	3.21	3.04	3.40	2.91	2.85	2.85	2.99	1.34	5/163									

*Significant at the .05 level if the F Value $\geq$ 2.28.

TABLE LXXI(H). EVALUATING THE OCCUPATIONAL PROGRAM

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
I-6. Evaluating the Occupational Program (Performance Elements)	3.17	3.16	3.46	3.02	2.95	3.11	3.11	1.54	5/167	2.83	2.58	2.90	2.91	2.45	2.98	2.81	1.94	5/159
(330) Maintain continual follow-up on the placement, employment, and training status of students..	3.21	3.33	3.30	3.11	3.00	3.29	3.21	0.67	5/165									
(331) Obtain follow-up data from employers of occupational program graduates..............	3.31	3.26	3.44	3.25	2.85	3.18	3.21	1.20	5/164									
(332) Determine reasons students leave the occupational program........................	2.97	3.11	3.50	2.97	3.00	3.10	3.06	0.81	5/165									
(333) Review supervisory evaluation reports assessing the occupational program..........	2.90	2.85	3.50	2.72	3.05	2.94	2.92	1.82	5/165									
(334) Assess the relevency of the occupational course offerings...........................	3.28	3.33	3.80	3.17	3.05	3.08	3.21	2.10	5/157									
(335) Disseminate a summary of the occupational education evaluation to the board of education, administrators, and advisory committee members..................................	3.14	2.82	3.00	2.82	2.55	2.85	2.86	1.23	5/162									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXXII(H). SELECTING STUDENT LEARNERS

Category J. Coordination (Cluster)	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-1. Selecting Student Learners (Performance Elements)	2.86	2.78	3.35	3.01	2.93	2.91	2.93	0.98	5/160	2.14	2.26	3.13	2.42	2.11	2.34	2.32	1.66	5/149
(337) Establish criteria for selection of student-learners	2.86	3.08	3.56	3.36	3.32	3.02	3.14	1.88	5/159									
(338) Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.	3.17	3.25	3.67	3.28	3.21	3.27	3.27	0.62	5/159									
(339) Administer occupational tests relative to student-learner selection and placement	2.52	2.63	3.00	2.83	2.68	2.86	2.75	0.73	5/160									
(340) Gather student-learner selection data	2.76	2.63	3.22	2.80	2.74	2.71	2.76	0.58	5/159									
(341) Interview students and parents to obtain student-learner interest and aptitude information	2.97	2.63	3.44	2.97	2.74	2.84	2.88	1.12	5/159									
(342) Identify a prospective student-learner on the basis of selection criteria and data	2.86	2.54	3.00	2.83	2.89	2.71	2.77	0.56	5/156									
(343) Match a student-learner's unique characteristics with an appropriate training station	2.85	2.71	3.56	2.97	2.90	2.96	2.93	1.13	5/155									

*Significant at the .05 level if F Value ≥ 2.28.

TABLE LXXIII(H). SELECTING TRAINING STATIONS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
3-2. Selecting Training Stations—(Performance Elements)	2.92	2.71	3.19	3.09	2.92	3.00	2.97	1.19	5/156	2.31	2.32	3.00	2.80	2.37	2.69	2.56	1.81	5/141
(344) Establish criteria for evaluating the training station potential of a business.....	2.79	2.63	3.11	3.03	2.90	2.94	2.89	0.91	5/155									
(345) Identify prospective cooperating employers to provide on-the-job training stations......	3.03	3.04	3.78	3.29	3.16	3.09	3.16	1.55	5/156									
(346) Establish criteria to evaluate qualifications of prospective on-the-job instructors........	2.86	2.78	3.25	3.27	2.90	3.00	3.00	1.21	5/153									
(347) Assess training capability of the on-the job instructor of the prospective training station..................................	2.96	2.63	2.89	3.36	2.95	2.98	2.99	1.96	5/154									
(348) Assess educational adequacy of the prospective training stations facilities and equipment..................................	3.18	2.96	3.33	3.38	3.11	3.04	3.15	1.08	5/154									
(349) Assess safety provisions of the facilities and equipment of the prospective training station..................................	3.14	2.87	3.11	3.32	3.11	3.22	3.16	0.78	5/152									
(350) Convince an employer to provide a training station for cooperative occupational education..................................	2.97	2.67	3.56	3.09	2.79	2.96	2.96	1.49	5/155									
(351) Arrange with a union to make contract provisions for student-learners................	2.52	2.13	2.56	1.97	2.44	2.74	2.40	2.71*	5/153									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXXIV(H). DEVELOPING A TRAINING PLAN AND AGREEMENT

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-3. Developing a Training Plan and Agreement———	2.87	3.00	3.63	3.29	2.81	3.12	3.09	2.85*	5/157	2.24	2.27	2.89	2.64	2.21	2.55	2.45	1.43	5/150
(Performance Elements)																		
(352) Develop a training agreement between student-learners, their parents, the school, and the cooperating employer......................	2.97	2.91	3.50	3.06	2.68	3.08	3.01	1.31	5/156									
(353a) Arrange school and work schedules with student-learners, school, and employers......	[illegible]	3.04	3.60	3.33	2.78	3.13	3.09	2.97*	5/156									
(353b) Develop a systematic training plan with the cooperating employer and/or on-the-job instructor.................................	2.86	3.04	3.80	3.47	2.90	3.13	3.16	4.44*	5/157									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXXV(H). COMPLYING WITH GOVERNMENT EMPLOYMENT REGULATIONS

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-4. Complying With Government Employment Regulations———————	2.87	2.35	2.98	2.58	2.44	2.80	2.67	1.67	5/156	2.32	2.46	3.10	2.61	2.22	2.44	2.47	1.40	5/148
(Performance Elements)																		
(354) Aid student-learners in procuring work permits....................................	2.75	2.48	3.09	2.77	2.58	2.70	2.70	0.63	5/156									
(355) Assist the cooperating employer in obtaining information concerning federal and state wage and hour classifications................	2.93	2.22	2.27	2.41	2.47	2.72	2.63	2.66*	5/155									
(356) Assist the cooperating employer in acquiring a federal permit to pay a training wage......	2.71	2.30	2.64	2.38	2.39	2.80	2.57	1.24	5/154									
(357) Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation....................	3.07	2.39	2.91	2.71	2.37	3.00	2.78	2.24	5/155									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXXVI(H). SUPERVISING STUDENT-LEARNER'S ON-THE-JOB EXPERIENCE

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-5. Supervising Student-Learner's On-The-Job Experience	3.05	2.93	3.27	3.33	3.04	3.01	3.10	1.68	5/156	2.04	2.33	2.70	3.36	2.89	2.49	2.65	8.25*	5/147
(Performance Elements)																		
(358) Prepare the student-learner for an interview with the cooperating employer and training station personnel	3.36	3.23	3.64	3.44	3.21	3.13	3.30	1.25	5/156									
(359) Assist the student-learner in on-the-job training orientation	3.14	2.96	3.55	3.50	3.26	3.15	3.24	1.88	5/156									
(360) Assist the cooperating employer's personnel in accepting the training status and role of the student-learner	3.00	2.91	2.91	3.33	3.11	2.89	3.04	1.42	5/155									
(361) Maintain good working relationships with training station personnel	3.32	3.18	3.46	3.58	3.32	3.31	3.37	0.99	5/155									
(362) Develop a procedure to insure student's safety in the training station	3.29	3.00	3.26	3.39	3.11	3.20	3.22	0.73	5/156									
(363) Develop a plan for supervision of on-the-job training	3.11	3.09	3.55	3.67	3.37	3.20	3.32	2.79*	5/155									
(364) Inform the administration of coordination itinerary	3.14	2.73	2.90	3.25	3.00	2.89	3.01	1.48	5/153									
(365) Assess the on-the-job experience daily reports with the student-learner to plan future instruction	2.96	2.86	3.18	3.26	2.95	2.93	3.02	0.85	5/154									
(366) Encourage the on-the-job instructor to follow the training plan in providing experiences for the student-learner	2.93	3.00	2.64	3.42	3.16	3.04	3.09	2.20	5/155									
(367) Maintain the student-learner's progress reports for on-the-job training and related instruction	3.04	2.91	3.36	3.39	3.21	3.09	3.16	1.45	5/155									
(368) Examine the student-learner's progress reports to determine future on-the-job training	3.15	3.00	3.50	3.44	3.16	3.09	3.20	1.55	5/153									
(369) Maintain a record of individual work hours, wages, and work experiences of on-the-job training	2.86	2.68	3.18	3.00	2.95	2.75	2.87	0.61	5/153									
(370) Assist the student-learner in the solution of problems related to on-the-job training	3.39	3.23	3.73	3.47	3.26	3.18	3.34	1.22	5/155									
(371) Control student-learner in the solution of problems related to on-the-job training	2.86	3.09	3.55	3.41	2.84	2.98	3.08	1.78	5/150									
(372) Control the transfer of student-learners within the cooperative occupational educational program and to other school programs	2.59	2.68	2.82	3.06	2.44	2.71	2.74	1.43	5/152									
(373) Conduct termination procedures for on-the-job training for the student-learner when conditions demand it	2.89	2.77	3.18	3.33	2.67	3.00	3.00	2.03	5/153									
(374) Sponsor an employer-employee appreciation event	2.82	2.46	3.20	2.67	2.39	2.76	2.69	1.16	5/152									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXXVII(H). EVALUATING THE STUDENT LEARNER'S ON THE JOB PERFORMANCE

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-6. Evaluating the Student Learner's On-the-Job Performance	3.35	3.16	3.66	3.69	3.35	3.16	3.37	3.35*	5/158	2.48	2.24	2.80	3.42	2.94	2.72	2.81	5.10*	5/149
(Performance Elements)																		
(375) Evaluate the student-learner's work qualities and habits on the job	3.31	3.26	3.82	3.75	3.32	3.20	3.40	3.24*	5/158									
(376) Evaluate the student-learner's personal traits and characteristics on the job	3.14	3.04	3.55	3.72	3.37	3.07	3.29	4.12*	5/158									
(377) Check the student-learner's progress in acquiring skills on the job	3.38	3.26	3.55	3.67	3.47	3.27	3.42	1.44	5/157									
(378) Check the student-learner's progress with the on-the-job instructor and other training station personnel	3.41	3.22	3.73	3.64	3.26	3.20	3.38	2.17	5/157									
(379) Assess the student-learner's performance with the assistance of the on-the-job instructor	3.52	3.09	3.70	3.69	3.32	3.07	3.36	4.03*	5/155									

*Significant at the .05 level if the F Value ≥ 2.28.

TABLE LXXVIII(H). IMPROVING RELATED AND ON-THE-JOB INSTRUCTION

	IMPORTANCE LEVEL									PERFORMANCE LEVEL								
	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF	Ag	B	DE	He	HEc	T&I	W.Mean	F Val	DF
J-7. Improving Related and On-The-Job Instruction—(Performance Elements)	3.19	3.02	3.18	4.42	3.16	3.23	3.22	1.10	5/157	2.32	2.29	2.80	3.29	2.78	2.66	2.71	5.24*	5/147
(380) Obtain suggestions from the on-the-job instructor to guide the selection of lessons for related instruction....................	3.28	3.13	3.55	3.36	3.26	3.36	3.32	0.59	5/156									
(381) Evaluate the quality of the on-the-job training received by the student-learner.....	3.31	[illegible]	3.36	3.61	3.37	3.24	3.33	1.76	5/157									
(382) Assist the on-the-job instructor with development of teaching techniques during supervisory visits to the training station...	2.76	2.74	2.55	3.28	3.05	2.96	2.95	1.88	5/157									
(393) Update related instruction for student-learners on the basis of information on technology obtained from cooperating employers..................................	3.35	3.13	3.36	3.69	3.26	3.38	3.39	1.69	5/157									
(394) Obtain information from the advisory committee on ways to improve related instruction and on-the-job training................	3.24	3.04	3.09	3.14	2.84	3.23	3.13	0.79	5/156									

*Significant at the .05 level if the F Value ≥ 2.28.

APPENDIX H

RESPONDENTS ADDING PERFORMANCE ELEMENTS SEGREGATED VIA CLUSTER AND SERVICE AREA TEACHER GROUP

NUMBER OF OCCUPATIONAL TEACHERS WHO ADDED PERFORMANCE ELEMENTS TO EACH CLUSTER

Cluster Number and Title	Ag	B	DE	He	HEc	T&I
A-1. Utilizing Traditional Educational Technology	0	1	0	3	0	3
A-2. Utilizing Innovative Educational Technology	0	1	0	1	0	0
A-3. Utilizing Visual Aids	0	1	0	0	0	0
A-4. Employing Group Interaction Techniques	0	1	0	0	0	0
A-5. Employing Teacher-Centered Methods of Presentation	2	0	0	1	0	0
A-6. Applying Basic Instructional Strategies	1	0	0	0	0	0
A-7. Utilizing Community Resources	1	1	1	1	2	0
A-8. Directing Instruction by Students	0	1	0	0	0	0
A-9. Directing Laboratory Instructions	0	0	0	0	1	0
A-10. Directing Independent Study	0	0	0	0	0	0
B-1. Projecting Instructional Resource Needs	0	0	0	0	0	0
B-2. Preparing the Annual Budget	0	1	0	0	0	0
B-3. Procuring Supplies and Facilities	1	0	0	0	0	0
B-4. Maintaining Records and Files	0	0	0	1	0	0
B-5. Assuring Laboratory Safety	0	0	0	0	0	0
B-6. Establishing Acceptable Student Behavior	0	1	0	0	0	1
B-7. Managing the Laboratory	0	0	0	0	0	0
C-1. Planning School-Community Relations Activities	0	0	0	0	0	0

Cluster Number and Title	Ag	B	DE	He	HEc	T&I
C-2. Publicizing Occupational Education and the School's Occupational Program	0	1	0	0	0	1
C-3. Maintaining Good School-Community Relations	0	0	0	0	0	1
C-4. Obtaining School-Community Feedback on the Occupational Program	0	0	0	0	0	0
C-5. Maintaining Good Intra-School Relationships	0	0	0	0	0	1
D-1. Structuring/Designing a Course	2	2	0	0	0	0
D-2. Planning a Lesson	2	1	0	1	0	0
D-3. Selecting Instructional Materials	0	0	0	1	0	0
D-4. Developing Instructional Materials	3	0	0	2	0	0
E-1. Obtaining Background Information on Students	0	2	0	2	0	1
E-2. Promoting Constructive Teacher-Student Relationships	0	1	0	1	1	0
E-3. Counseling Students	1	1	0	1	0	0
E-4. Involving Guidance Counselors in Assisting Students	1	1	0	1	0	0
E-5. Involving Other Persons and Agencies in Assisting Students	1	0	0	1	0	0
E-6. Assisting Students in Planning Post-Secondary Education and/or Securing Employment	1	2	0	0	0	0
F-1. Establishing a Student Occupational Organization	0	0	0	0	0	0
F-2. Advising a Student Occupational Organization	0	0	0	0	0	0
F-3. Participating in State and National Student Occupational Organization Activities	0	0	0	0	1	1

Cluster Number and Title	Ag	B	DE	He	HEc	T&I
G-1. Upholding the Philosophy and Goals of the Profession	0	0	0	0	0	0
G-2. Contributing Professional Service	1	0	0	0	0	0
G-3. Advancing One's Professional Competencies	0	0	0	0	0	0
G-4. Supervising Student Teachers	0	0	0	0	1	0
H-1. Evaluating Student Performance	0	0	0	0	0	0
H-2. Involving Students in Evaluation	0	0	0	0	0	0
H-3. Formulating Test and Rating Sheets	0	0	0	0	1	0
H-4. Administering and Analysing Tests	0	0	0	1	0	1
H-5. Evaluating Quality of Instruction	0	0	0	1	1	0
I-1. Planning, Conducting, and Utilizing a Community Survey	1	0	0	0	0	2
I-2. Organizing an Advisory Committee	0	0	0	0	0	0
I-3. Maintaining and Utilizing an Advisory Committee	0	0	0	0	0	0
I-4. Planning the Occupational Program	1	0	0	0	0	0
I-5. Preparing a Long-Range Occupational Program	0	0	0	0	0	0
I-6. Evaluating the Occupational Program	0	0	0	0	0	1
J-1. Selecting Student Learners	0	0	0	0	0	0
J-2. Selecting Training Stations	1	0	0	0	0	0
J-3. Developing a Training Plan and Agreement	0	0	0	0	0	0

Cluster Number and Title	Ag	B	DE	He	HEc	T&I
J-4. Complying With Government Employment Regulations	0	0	0	0	0	0
J-5. Supervising Student-Learner's On-The-Job Experience	1	0	0	0	0	0
J-6. Evaluating the Student Learner's On-The-Job Performance	0	0	0	0	0	0
J-7. Improving Related and On-The-Job Instruction	0	0	0	0	0	0